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AMERICAN PLANNING AND CIVIC ANNUAL

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AMERICAN PLANNING AND CIVIC ANNUAL

A RECORD OF RECENT CIVIC ADVANCE IN THE FIELDS OF PLANNING, PARKS, HOUSING, NEIGHBORHOOD IMPROVEMENT AND CONSERVATION OF NATIONAL RESOURCES, INCLUDING THE ADDRESSES DELIVERED AT THE CITIZENS CONFERENCE ON PLANNING, HELD AT DALLAS, TEXAS, ON APRIL 21, 22, 23, 24, 1946

EDITED BY

HARLEAN JAMES

AMERICAN PLANNING AND CIVIC ASSOCIATION

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The two organizations join in the publication of

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and the
QUARTERLY, PLANNING AND CIVIC COMMENT

The purpose of the American Planning and Civic Association is the education of the American people to an understanding and appreciation of: local, state, regional and national planning for the best use of urban and rural land, and of water and of other natural resources; the safeguarding and planned use of local and national parks; the conservation of natural scenery; the advancement of higher ideals of life and civic beauty in America; the improvement of living conditions and the fostering of wider educational facilities in schools and colleges along these lines.

The purpose of the National Conference on State Parks is to inform the public through a central clearing house of information, publications, conferences, courses of training in schools and colleges, and by other educational means, of the value of state parks, historic sites, forests and preserves, suitable for recreation, study of natural history and science, preservation of wild life and conservation of natural scenery, by the development within the States of well-balanced state park systems; to the end that every citizen of the United States shall have easy access to state recreation areas and appreciate their value as a recognized form of land use.

PREFACE

THE EDITOR

THE AMERICAN PLANNING AND CIVIC ANNUAL, which in recent years has been issued in the early months of the year is in 1946 distributed to its readers somewhat later in order to include the excellent papers which were presented at the Citizens Conference on Planning which was held at Dallas, Texas, April 21–24. The papers and discussions speak for themselves, but the American Planning and Civic Association would be remiss if its officers did not acknowledge the fine exhibit which included a series of historical photographs, enlarged and presented by the Dallas *News*. Thus the history of planning in Dallas was made graphic. A reprint from the *American City* for October, 1910, was available for distribution and recounted the active part which the young American Civic Association played, at the invitation of Mr. George B. Dealey, in initiating planning in Dallas. The lighting and panel settings of the exhibit were unusually effective. The officers of the Association, too, wish to acknowledge the cordial hospitality of Dallas, the well-arranged tour of the city, and the visits to the Art Museum and the Hall of State, where one of the sessions was held. Mayor Woodall Rodgers and his staff of city officials, as well as the civic leaders in Dallas, did everything in their power to make the meeting profitable for all who came. And about 300 did come, and many were turned away from the joint Rotary Lunch which was limited to 500.

There was one sad note at the Conference. Mr. George B. Dealey, who had taken such a deep interest in the program of the Conference, did not live to attend it. But the concrete results of the planning which Mr. Dealey had promoted for half a century were everywhere in sight. Mr. Dealey and the Dallas *News* were inextricably bound up with planning in Dallas. It is encouraging to note that his surviving family and staff have pledged the *News* to carry on in the Dealey tradition.

An interesting feature of the Conference was the presentation by Mayor Rodgers of the keys to the city to the visiting Mayors—nine in number. The Mayors also participated in an excellent radio program, which was heard by many members of the Conference following an evening session.

On April 19 and 20, a Community Planning Clinic was arranged in Oklahoma City, in order to take advantage of the planning and civic leaders on their way to Dallas. The Oklahoma City Chamber of Commerce enlisted the aid of the City Administration, the Public Schools, the Board of County Commissioners, and the Capitol Hill Chamber of Commerce as sponsors along with the American Planning and Civic

Association. Lieut. General Raymond Wheeler, Mayor A. P. Kaufmann of Saint Louis, Flavel Shurtleff, Herbert Hare, Harland Bartholomew, Mayor Vincent J. Murphy of Newark, Mayor Woodall Rodgers of Dallas, Julian Tarrant, Seward Mott, Paul Oppermann and Major General U. S. Grant, 3rd all participated in the Oklahoma City Community Planning Clinic. Oklahoma City is famous for its hospitality and all of the visiting planning leaders were feted and dined in the traditional manner. Two of the papers in this ANNUAL were delivered in Oklahoma City—one by General Wheeler and one by General Grant.

It was brought out in the Round Tables at Dallas that there is a demand for local planning meetings or clinics in which programs participated in by out-of-town, as well as local leaders will spread the knowledge of city planning and what it means to a community. In the Round Table on Citizens Organizations for Community Planning, it was suggested that the American Planning and Civic Association undertake a study of types, aims and methods of such organizations.

The theme of the Dallas and Oklahoma City Conferences was on *education*—education of students in school to learn what planning is and what it can do for a community—education of adults to understand what planning is and be in a position to examine critically the plans prepared by experts. The prepared papers and the discussions of the conferences certainly contributed to the education of those who were in attendance and they are presented in this volume in the belief that readers may extend the limits of their planning horizons.

The papers delivered at meetings of the National Conference on State Parks are, ordinarily, included in the AMERICAN PLANNING AND CIVIC ANNUAL. But during the war years, at least after 1942, no national conferences were held. Last year, reports from the State Park agencies were presented. But in 1946 no state park reports are to be found in the ANNUAL. There are two reasons for this. The Pacific Coast Pilgrimage of State Parks, which is the form of the Annual Meeting this year, will not take place until September 21–October 1—too late for incorporation in this volume. Also the National Conference on State Parks is issuing this year a Twenty-fifth Anniversary YEAR BOOK of State Parks. It was, therefore, thought to be a duplication to present the same material in the ANNUAL. Readers are referred to the YEAR BOOK for information concerning State parks.

Readers are also reminded that the ANNUAL and the YEAR BOOK are supplemented by the quarterly—PLANNING AND CIVIC COMMENT—which brings current news in the fields of both organizations.

July 10, 1946

Report on Progress

HORACE M. ALBRIGHT, President, American Planning and Civic Association

WE PRESENT in this ANNUAL what we believe to be an unusual array of wisdom as expressed by half a hundred experts in planning, conservation and allied fields. In the January, 1946 PLANNING AND CIVIC COMMENT we presented a series of resolutions adopted by our Board on January 26, 1946. By some these resolutions may be taken as mere recordings of opinion. They are, in fact, much more than that. The resolutions adopted by the Board each year are the result of consultation with many of the same experts as those who write for this ANNUAL. They are a program of action. All the resolutions are based on well-defined principles. Some are long-range and can be measured only with the passing of years. Others are definite and short-range. They can be checked promptly for accomplishment. Readers of the AMERICAN PLANNING AND CIVIC ANNUAL will be interested, we believe, in a progress report on our program which in time we hope to see realized.

PLANNING

There was evidence at the Dallas Conference that local citizen groups to cooperate with local planning commissions were increasing in number and activity and that there was a definite stirring in communities to promote citizen activity. The discussions disclosed that the coordinating function of planning agencies, though recognized in many cities, is all too often violated when one phase of planning is allowed to dominate other elements, as in the case of highways which provide improved traffic facilities at the expense of residence of other neighborhoods. No doubt most local planning commissions are studying the complicated traffic problem, but it would be a pity if cities were to fall victim to the very transportation which made their growth possible.

The Association welcomed the information from the Commissioner of Public Buildings, as told in this ANNUAL, that Federal buildings are now located in accordance with *bona fide* official local plans which are being adhered to by local officials themselves. For at least a quarter of a century, the Association has been striving to ensure this practice.

The tendency also seems to be for local housing authorities, with the approval of Federal agencies, to locate housing projects in accordance with local master plans. In many States the State Highway Commissions are making a point of approving new Federal-aid thruways in urban areas in accordance with the city plan. Unfortunately, this is not universally the case.

The redemption of extensive blighted urban districts is still, in most instances, in the talking stage. As indicated in the article by Seward Mott and Max Wehrly, a good many States have enacted legislation—

some of it better than others; but actual application to an extensive area is still in the future.

Rural highways are again coming into the public eye. Those counties which have put county-wide planning and zoning into effect are in a position to prevent a new avalanche of unneeded commercial buildings and billboards along their highways. They can develop roadsides in keeping with the highways. Cities had to learn their lesson concerning the space needed for business in relation to residence neighborhoods. Rural communities, being scattered and less cohesive, may be slower to realize that they may be injured by devoting too much space along rural highways to commercial uses. Local communities, scattered farm populations and the traveling public should be served, but in an orderly way which will protect most of the roadsides from ugly and distracting developments.

One of the results of the dissolution of the National Resources Planning Board has been the decrease in State Planning Boards and the tendency on the part of some to become mere advertising agencies for the State. Much remains to be realized in the field of state planning, but enough State Planning Boards are working on significant programs to point the way.

Likewise the lack of an over-all planning agency at the national level is apparent when we examine the many unrelated and unreconciled proposals for postwar land and water development.

And above all, the Association is exerting all of its influence to bring about wide publicity for all new plans and to provide channels by which technical proposals may receive the benefit of citizen study and comment.

Housing

We have yet to see the enactment of an Act of Congress which will make permanent the consolidation of the Federal Housing Agencies. The passage by the House of the Wagner-Ellender-Taft bill, which has already passed the Senate, would do this. Without this legislation public housing, and to some extent, private housing, is left in a chaotic situation. The Emergency Housing Program, to be participated in by both private and public agencies, is first on the program. It may be some time before building materials and labor will be available for the provision of houses for all classes of the population; but when private enterprise is finally given full opportunity to resume its activities, it will be a decade at least before we shall be in a position to judge just how far the new housing conforms to wise planning and the needs of all the citizens. One thing is certain and that is that taxpayers of the future will not complacently contemplate the provision of utilities for scattered built-up communities, according to the whim of owners or promoters. In order to claim extensive public expenditures from the central city, private subdivisions should be located on sites adjoining built-up districts, so that cities may grow in an orderly and economical way.

Federal City

The plea for a larger Federal contribution to the District budget was met in the Senate by an increased Federal contribution from six to ten million dollars. This in conference between the two Houses was reduced to eight million, still a definite step in the right direction. Nothing so far has been accomplished in the reorganization of the National Capital Park and Planning Commission, as recommended by the Bureau of the Budget. The bill for Urban Redevelopment (S.1462), which passed the Senate, October 18, 1945, was passed with amendments by the House. Not in the best form, it offers opportunity for progress. The National Capital Housing Authority continues to operate its public housing projects, but the future of the public housing situation in the District is confused. Enactment of pending bills providing for national and District housing, still hanging fire in the House, could clear up the mess.

Plans to erect permanent office buildings in the White House grounds have been blocked, but so far no announcement has been made of definite plans for a permanent Executive Office Building on a suitable site. A restudy by the National Capital Park and Planning Commission of the entire Lafayette Square area will no doubt bring forth a comprehensive plan adapted to the Year 1950.

The unsightly billboard still stands in the South yard of the Treasury. The once vaunted vista looking up Pennsylvania Avenue now focuses on this misplaced billboard which receives its periodic coat of paint no matter how shabby public and private buildings become.

Plans for the Arboretum still lag.

Conservation

Federal appropriations have not yet been made for the purchase of private lands within National Parks and Monuments, but, after heavy cuts in the House, the Interior Department Appropriation Bill did finally carry substantial sums to permit the National Park Service to rehabilitate the neglected areas under its jurisdiction, in view of the greatly increased demands on the part of the public. Development and maintenance are imperative if park visitors are to be served and protected adequately.

It is to be hoped that the wide discussion of Jackson Hole has brought about a better understanding on the part of the public as to the Federal responsibility for creating new parks and monuments without undue local influence, either for or against. The excellent Hayden Bill (S.67) to provide for participation by the States in revenues from National Parks and Monuments remains in innocuous desuetude, although its passage would provide for a fair treatment of States and counties, on a par with national forests and other Federal reservations.

Judged by the report from the Chief Forester in this Annual, the U. S. Forest Service is making progress in maintaining sustained yields

of forest products, but needs the support of the public in rebuilding the overdrawn account of forests during the war. This once rich Republic will no longer be rich if its forest resources are allowed to dwindle.

The Soil Conservation Service continues in its vital effort to bring about the saving and best use of the soil without which our civilization cannot expect to survive. The papers in the Conservation section of this volume all point to the bitter need for a broad conservation program to conserve our lands, waters and minerals for their best uses. For this comprehensive planning by responsible agencies is needed. A well-constituted national planning agency could render yeoman's service in these matters.

The hearings in the House Committee on Rivers and Harbors resulted in a favorable report on a compromise pollution bill (H.R.6024)—a bill satisfactory to those who supported the Mundt Bill. But a considerable number of legislative steps are needed to pass this measure.

The project to develop Santa Fe, New Mexico, by a plan in harmony with its 300 years of history, is making progress and a satisfactory location has been found for its new Federal-aid thruway which will not overshadow and injure its ancient plaza nor destroy its treasured buildings of the past.

Temporarily at least, the plans of the Palisades Interstate Park Commission to build a parkway from George Washington Bridge through the Palisades section of the park in New Jersey and across the intervening territory to the Harriman section in New York, have been blocked. Better luck next time!

While the headquarters office of the National Park Service still remains in Chicago, it has been found necessary to bring to Washington a small group of key officials. As the National Park Service is highly decentralized, with its four Regional Offices and its park and monument staffs, it is imperative that its rather small central office be returned to Washington at the earliest opportunity.

The decision of the Board of Engineers for Rivers and Harbors against the proposed power development on the Potomac River, in the face of overwhelming national and local opposition, was an indication that we may in the future expect comprehensive water programs which will include power *only* when the sacrifices of existing land and water values are manifestly less than the possible economic gains from power. This is a harbinger of saner comprehensive planning for our water resources than we have sometimes had in the past. And it culminated a fight which the American Planning and Civic Association and other conservation organizations had carried on in various applications for forty years, with twenty years of opposition to the Potomac project.

And so from year to year, even in the long-range plans, we can detect and mark progress, even as new problems appear to demand study and attention.

The National Estate

TOM WALLACE, editor of *The Louisville Times*, Vice-President of the American Civic and Planning Association, Louisville, Ky.

THE national estate, insofar as it consists of real property, is in the hands of this generation, but it should be considered a trust estate to be handed down to future generations. This generation is, as every succeeding generation will be, responsible for its improvement and, by planning that improvement, may avert impairment of the estate.

Aims of those who plan improvement in any community, and those who plan to get votes, often clash. Therefore, national planning bodies composed of people of varying political loyalties are essential. They can influence improvement which will increase the value of, and the returns from the national estate. That means increasing the economic strength, the military strength, the peace-table strength of the United States.

The American Planning and Civic Association is composed of people who do not bring their politics into the forum when discussing public improvement.

Quite probably, if General Ulysses S. Grant 3rd and I should discuss politics, we would differ as widely as his grandfather differed with Lee before Appomattox, but I have never heard his political opinions and he has never heard mine.

Planners are not impractical idealists. Their feet are on the ground. Their heads are not in the clouds. There are no clouds in their heads. There is no fog in their thinking. They apply to larger problems the principles anyone applies to improvement of his home or his farm.

They want to see counties, towns, cities, States, improved under rules which apply everywhere. They realize that such units of government are competitors of units of their respective classifications. They look upon areas under jurisdiction of such units of government as property of future generations regardless of what form of government future generations may elect to employ.

The differences between such planners and those who plan to get votes by measures of expediency is that the vote seekers sometimes are motivated by the principle declared in Owen Meredith's famous stanza ending in "civilized man cannot live without cooks."

The candidate can, sometimes does, live without conscience and live without heart. Oftener, he is insufficiently informed.

Much of the development which the United States has experienced has been an expression of individual liberty; of go-as-you-please—or, in words of a Kentucky feudist whose life ended when bullets opened channels from his heart, "Do as you damn please."

That plan is less practical now than it formerly was. It lessens public revenues, increases public expense, diminishes the value of the national estate, imperils our collective strength in arms, on which depends the weight of our will-for-peace.

The difference between non-political planning for improvement of the national estate and planning for votes often is the difference between the work of an architect and the action of a man who would head a hog when the fire is under the scalding tub and the knife is in the hand of the sticker.

How the national estate suffers from lack of planning may be illustrated by mentioning a factor in human welfare which has thus far been neglected in this program, and which I do not see mentioned in the rest of the program.

I refer to water.

To anglers, or many of them, water is something which floats a fish till a fly is cast. To people who live in town, it is something which comes from the spigot beyond which it is unnecessary and uninteresting to look or inquire.

To many engineers, water is of no biological value except in highballs or turbines. But, actually, it is one of the four chemical elements. Without it, the human race cannot use the other three elements.

There has been no full-scale national planning as to water. This can be illustrated by the fact that there are now five or six plans as to how to correct the misconduct of the Missouri River, admittedly bad.

Four of the five plans must be worse than one of them, but each has its partisans. Any one of them may prevail in Congress.

The area immediately affected is as large as Italy, France and Spain combined. It produces about half of this Nation's breadstuffs, about one third of its wool. Its population is 7,000,000.

Its soil rightly guarded, its water rightly used, it could support 100,000,000.

Future generations may need the area for that broadened use. This generation's job is to so administer that part, and other parts, of the national estate that future generations will not be impoverished.

The United States Government, employing much, not all, of the Nation's manpower is spending the money of all the people, not all of the money of all of the people, but much of it.

It moves your money from the Federal Treasury with steam shovels. The danger is not that nothing will be done to the Missouri Valley—but that, at enormous public expense, the wrong thing may be done, and that nothing then can be done about it.

And this danger is duplicated in large areas all over the continent. I am not speaking for the MVA plan, the Sloan plan, the Pick plan, Reclamation Service plan, or the Missouri Basin Inter-Agency plan, or any other plan.

I am simply saying that the steam shovels are parked at the Treasury; that CIO, AFL and USA agree that providing employment is important, and that all three alphabeticals are squalling for action.

People who differ from planners; who differ in aims or equipment from the architect who brings to bear the laws of a great science, wishing to produce a bridge or a building which will be an asset of his community or his country, a monument to him; people who simply want to head the hog and get the bacon, threaten many items in the national estate.

That is why people, hordes of people, should wake up and join and support the American Planning and Civic Association and kindred organizations which study local, state and national problems affecting the Nation's real property.

If we leave it to hog headers, to bacon savers, instead of disinterested planners, the Nation will see the continued pollution of its streams, lakes and ocean estuaries; continued political pot boiling, which may permanently injure many of our natural resources.

Hog headers, bacon savers, along with, of course, innocents who mean well, but who have not studied planning, imperil the future of cities, towns, counties, States—which as enterprises, competing with enterprises in their respective classes, require well-thought-out plans to increase revenue, to avert loss.

Rather than take up too much of your time, I suggest that each of you read an article in the April number of the *Reader's Digest*, a condensation of an article in the *Saturday Evening Post*, which refers to the various plans to make Big Muddy behave. The article points out the ill results of lack of national planning relating to water and soil. I ask you, once more, to bear in mind that, as long as national planning is left to politicians, it will never be done.

Always politicians will be content to head the hog and get the bacon.

Wanted: A comprehensive, coordinated and consistent Land and Water policy and plan which will recognize and reconcile local, state and national land and water-use patterns at each governmental level.

Where Our Real Wealth Lies

LOUIS BROMFIELD, Vice-President, Friends of the Land,
Malabar Farm, Lucas, Ohio

FEW people realize or understand that very close to 50 percent of our population is dependent upon agriculture as the source of its income and employment. Actually only about 20 percent of the population is engaged directly in a more or less productive agriculture but agriculture and the productivity of our soil lies at the base of the great agricultural machinery business, the greater part of the mail order house business, large segments of the gas, oil, rubber and steel industries, the vast milling and packing-house trades. It provides a great portion of the revenue of our railroads and is the economic base of virtually all our small towns and cities as large as Omaha, Kansas City, Des Moines, Montgomery, Alabama, Minneapolis and countless others. It supports largely whole segments of the "servicing" in the form of the filling stations, garages, and department stores, which have become so important an element of our highly industrialized national economy. Therefore agriculture and a good, productive agriculture, becomes of vital importance not only from the point of view of employment but also from the point of view of the agricultural purchasing power which largely supports industry and in turn provides employment and consequently the additional purchasing power of the great segment of industrial workers. In other words when farmers cannot go to town to buy tires or radios or automobiles it means not only that hundreds of thousands of industrial workers are thrown out of work in Pittsburgh, Detroit, Chicago and elsewhere but that *their* purchasing power is, in turn, curtailed sharply or cut off altogether.

Likewise, if we have a poor agriculture which produces commodities either in too small quantities or through inefficiency at high prices without profit, the consumer's market becomes limited by the increasingly high prices created by scarcities or the high cost of inefficient production, and consumption is limited with a depressing effect upon the employment based upon agricultural production and consequently upon the purchasing power of the non-agricultural element dependent upon agriculture for employment.

It might be said with considerable truth that every depression we have experienced since the Civil War has begun at the agricultural end with the shrinking or disappearance of the purchasing power of the agricultural segment of our population and spread through the whole of our national economy.

In the past when the agricultural segment represented two or three times the current percentage of our total population, the fluctuation of prices and occasional surpluses had something to do with the prosperity and purchasing power of the farmer. Today this is much less true and is becoming steadily less and less true. This depression of prosperity and

purchasing power is caused today much less by prices or surpluses than by a poor and declining agriculture of constantly decreasing yields per acre and steadily increasing cost of production per bushel of grain, bale of cotton, quart of milk, or dozen eggs.

One of the great errors of agricultural economy has been to think of agricultural production in terms of *total* production rather than in terms of production *per acre*. During the war we achieved a record of *total* food production but never in any country at any time has food been produced so expensively—so expensively indeed that even with high prices it has been necessary to create subsidies (paid in the end by the consumer out of his pocket in the form of taxes) in order to get sufficient production. This is so because the cost of production per acre or per bushel was high.

That cost has been increasing steadily since the first furrow was turned on this American continent, for the simple reason that the production per acre has been steadily declining. In the corn belt areas, which once produced as virgin soil without fertilizer, yields of 120 bushels per acre averages have declined within the past few years to as low as 37 and 44 bushels per acre. In the cotton area, where one acre once produced two bales of cotton, some cotton farmers are today farming six or seven acres to produce one bale. Beyond that point, even with parity prices and subsidies, cotton can only be produced at a loss and the land is abandoned to weeds and scrub oaks and pine. There are millions of acres of such land, producing no real wealth, employment or purchasing power and in many cases paying no taxes either to county, State or Nation. The annual production of wheat in this country is only twenty bushels per acre as opposed to sixty bushels in France. And so it goes all along the line.

Let us examine what this declining production really means, first to the farmer himself, his prosperity and his purchasing power and second, to the Nation itself.

It is perfectly clear, I think—as simple as the addition of two and two—that the corn produced by a farmer who gets yields of only twenty bushel per acre must cost him five times as much to produce per bushel in terms of labor, seed, taxes, interest, wear and tear, and possibly fertilizer as the farmer who produces 100 bushels on one acre. The farmer who produces two bales of cotton on one acre can produce it approximately ten times as cheaply as the farmer who produces one bale on five acres. In other words, the good farmer—the 100-bushel, two-bale-per-acre farmer—is always five to ten times as well off, regardless of prices, as the poor farmer producing low yields per acre. If prices are high, the good farmer is rich; if they are low, he is always solvent.

These estimates and the mathematical formula regarding declining production per acre and increasing cost of production hold equally true in relation to forage crops, to pasture production, all the way through the cost of a quart of milk, a dozen eggs, or a pound of meat, as well as in

relation to the farmer's profits on all of these items. The speaker knows the question from the manure spreader and the plow upward as a dirt farmer interested in practical economics. In an adventure devoted to the rehabilitation of 1100 acres of farm and grazing land we have been able to increase production from 50 percent to 1500 percent per acre from a very low level. In our Ohio country on grazing land which once required from 10 acres upward to carry a cow or a steer through the summer in poor condition, we have raised some pasture land through the use of minerals and pasture mowing to a carrying capacity of two and a fraction head *per acre* with steers pastured on it increasing weights in growth and meat from 250 pounds upward during the grazing season. The results and increased profits in terms of taxes and interest per acre alone need scarcely be explained.

This question of declining production per acre or per bushel and increasing cost of production per acre or per bushel—which operates according to mathematical law—lay at the root of the ruin of many farmers who sought to expand their production in the period of high prices during and after the First World War. Their error lay in expanding horizontally rather than vertically.

Let us examine what this means. According to informed authorities of the Department of Agriculture, only about 10 percent of our farmers produce anything near to 100 percent of potential production per acre through a good and efficient agriculture. These are the 10 percent who largely feed our immense urban populations. Another 30 percent produce from 50 to 60 percent of potentiality. The remainder produce little or no more than they consume. They are the marginal and submarginal farmers who produce little or no real wealth, pay few taxes and in many cases are liabilities rather than assets to the whole of the Nation's economy. Each year, their number dwindles as they are forced on to the road to become migratory workers, paying no visible taxes and living part of the time on relief, or into the great cities as industrial workers to be cared for in times of depression or even of average employment. In some States, where the average cash farm income is as low as $160–$170 a year, some of these families see as little as $5.00 a year in actual spending money. Their value, to the Nation's economy, becomes, in view of vast government expenditures to bolster agriculture, that of liabilities. In the lowest categories their cash income and its insignificant effect as purchasing power or to bolster industrial employment by buying industrial commodities becomes negligible or is entirely wiped out by the fact that we spend on agricultural agencies in this country approximately $13.00 per person—not per farmer but per person of the agricultural population. In few other ways can the cost of low agricultural production per acre be better illustrated.

But to return to the question of horizontal as opposed to vertical expansion and its evil effect upon the economy of the farmer—let us take

one of those farmers who are what might be called average "good" farmers—the 30 percent who produce from 50 to 60 percent of what they might produce per acre if they were really good and efficient farmers. Let us suppose that John Smith, of this category, owns 200 acres and wants to increase his production because corn or wheat or cotton are bringing high prices. Instead of staying home and producing the 40 to 50 percent more he could produce on his own 200 acres at very little increase in the cash cost of production per acre, he goes out and buys 200 more acres of land. As a result he has not increased his production per acre. He probably farms his whole 400 acres less well so that he produces less per acre both on his original 200 acres and on the 200 he has purchased, while his cost of production remains the same or has probably increased. This is especially true in war or boom times when labor and machinery are scarce and the costs of whatever he purchases or hires to cope with his increased acreage, including the price of the new land he has purchased, have risen to abnormal heights. He has possibly borrowed money or mortgaged, to purchase the additional 200 acres or used capital which could be much more profitably used as a reserve or to increase the productivity per acre of his original 200 acres.

When war and boom prices begin to fall, John Smith is caught. He has expanded his production horizontally rather than vertically and finds his comparatively low production per acre unequal to the job of paying additional interest and taxes and mortgage payments. Banks and insurance companies need the money and eventually are forced by a deflating economy and legal circumstances to foreclose, acquiring thousands of acres which they do not want, cannot sell and which cost them money to operate. And the foreclosure takes place not at the level of high prices which John Smith paid for the additional 200 acres but at the deflated prices of a period of depression on all 400 acres and John Smith is wiped out.

That is the story of millions of acres of farm land during the deflationary period which followed the war boom of the early twenties. If John Smith had stayed at home and increased his production by the 40 to 50 percent he could have done, the margin would have been almost pure profit, with no additional taxes, interest or mortgage payments. He would have been solvent and even prosperous with his 100 percent potential production per acre offsetting much or all of the decline in prices. By increasing his acreage and expanding horizontally he ruined not only himself but lost altogether the purchasing power so vital to the general employment and industrial economy of the Nation. Eventually, industrial workers are thrown out of employment because John Smith and his fellow farmers cannot buy the commodities manufactured by industry and in turn *their* purchasing power is not only cut off but they go on relief paid for out of taxpayers' money and capital which should be used to provide new enterprises, new employment and new markets.

That is the story of some millions of acres of agricultural land during the deflation that followed the First World War; and largely speaking it is the story of the effects of decreasing agricultural production per acre everywhere and at all times.

The tradition of horizontal expansion, like that of poor farming, has grown largely out of the history of a Nation with the largest pool of virgin natural resources and real wealth for its size in the world. We farmed poorly and greedily for the past 150 years because we could afford to do so. We had what appeared to be unlimited areas of rich virgin agricultural land. If a farmer mined one farm, he had only to take another further west and mine that one and then another, for free or at most for a dollar an acre. In that process we have destroyed one fourth of our good agricultural land beyond use save as possible forest land. Another fourth is on the way out and the rest, save for small areas of land owned by intelligent and wise individual farmers, is subject to the same depletion of organic material and minerals, to the same soil erosion that has created such havoc with our agriculture and national economy.

Following previous wars, even up to 1918, there was always free agricultural land to be taken up by veterans as a reward for their services. Today there is none and we are paying, all of us, including the veterans themselves, out of our own pockets, taxes to make up the recompense. It can be said that no country in the history of the world has ever destroyed its real wealth in the form of agricultural land and forests as rapidly as this one. This destruction manifests itself not only in actually destroyed land, in increasing numbers of marginal and submarginal farmers and dispossessed farm families who take to the road or migrate into our already overcrowded cities. It manifests itself also in steadily increasing costs of food, the basic item in the cost of living, in consequently declining standards of living, in constantly increasing demands for raises in industrial wages and the prices of manufactured commodities.

The destruction and declining production of our agricultural land lies at the root of a creeping inflation that has been in progress since the Civil War and which in the long run will be more devastating to the health, living standards, incomes and prosperity of the Nation than any temporary wartime or artificial boom inflation. We are approaching a subsidized agriculture. Indeed many agricultural commodities are already subsidized. If we pay increasing prices for agricultural commodities across the counter we are either starting the inevitable vicious spiral of increasing wages, increasing prices of industrial and agricultural commodities which constantly lower the purchasing power of the dollar and the standards of living of our people. As agricultural production per acre declines and costs increase and as our population increases we are moving exactly along the path which brought ruin to Chinese government, economy and civilization.

If we pay higher prices in subsidies rather than in cash across the counter, we are taking money out of the pockets of our citizens, through increasing taxation (either visible or invisible) and then constantly decreasing their purchasing power and draining away the capital which should be employed in a free Nation and under a free enterprise system to bolster its economy by providing employment and developing its real wealth. One of the foolish illusions held by many people along with the illusion that money is real wealth, is that scarcity and high prices mean prosperity and high living standards. Exactly the opposite is true. A large part of government regimentation has grown out of an effort to deceive ourselves into believing that we are maintaining our living standards by government bribery of the people, by subsidies and by high tariffs which are essentially no more than subsidies. We tax ourselves more and more in order to hold down living costs, devouring our economic vitals to do so and bringing ourselves constantly nearer to totalitarianism government, regimentation and a lower and lower standard of living. We are trying to deceive ourselves into the belief that we still possess vast reserves of real wealth in the form of natural resources and that these reserves are still highly productive. Neither assumption is true. The truth is that in the face of a rapidly increasing population we have destroyed our natural resources more rapidly than any other Nation in the history of the world and we are rapidly approaching the economic pinch and the lowered living standards which have existed in Europe for three centuries and in China and India for an even longer period.

Our wealth, our economy, our power as a Nation are not founded upon the gold buried at Fort Knox but upon our real and natural wealth. It, therefore, becomes imperative that we make the best possible use of the real wealth in the form of minerals, ores, oils, and similar resources, and that we barter our manufactured commodities, either directly or through the use of money and exchange in a three or four-cornered form of barter, for these raw materials and real wealth which we have utterly dissipated or never possessed. This is true even if we did no more than to stock-pile these lacking raw materials against future use to bolster our economy and the real sources of our high living standards.

In all the vast pool of natural resources and real wealth which this country once possessed, agricultural land and forests are the most important and vital. This is so primarily because they are the sources of real wealth which are, if properly managed, constantly renewable and constantly productive of more real wealth. This is also true because as the supply of minerals, oils, and other resources becomes more and more depleted, we turn more and more to agriculture and forests for the substitutes which can replace them. Our productive forest areas have been reduced to less than a sixth of their original size and during the war we cut down our forests approximately five times as fast as we have been replacing them. Fire in unmanaged areas takes each year a terrible toll.

We have destroyed a fourth of our good agricultural lands and are constantly wearing out through erosion or poor farming what remains to us of this most precious of all our real wealth and natural resources.

All of this was what Bernard Baruch, greatest of the world's practical economists, was talking about when he made to Congress what was to this Nation perhaps the most important statement of our generation and century—a statement which was largely overlooked and seems already forgotten. It was this—that we had best make an invoice of the real wealth and natural resources which are left to us before we go on distributing them around the world with a lavish hand in the form of manufactured commodities either for free or for money. Mr. Baruch knew what all of us should know—first, the real basis of our wealth and power is our natural resources and second, that money paid in exchange for these resources, either processed or as raw materials, only creates inflation and shortages and lowers living standards, unless this money is in turn spent outside the Nation for raw materials and real wealth which is the very heart's blood of Nations in the industrial age in which we live.

What we need in this country is not more dollars but dollars which buy more and more, and we shall only get dollars which buy more through intelligent use of our natural resources and real wealth. We shall only get dollars which buy more and more and raise rather than lower the living standards of our people through abundance with greater production, lower costs and profits for all. Each day our dollars buy less and less and each day there are new strikes, new demands for higher prices for industrial commodities and higher ceilings and parities for the farmer. In all of this both production and abundance suffer and as scarcities increase and prices go up, living standards and prosperity decline.

I am certain that the lips of some of you are already forming the word "surpluses." Surpluses, like so many other shibboleths of our day, are an illusion. For at least two generations in this Nation there has never been any such thing as a surplus save in a few single crop areas where men have stubbornly gone on producing year after year the same commodity, despite falling demands in the world as a whole. Cotton is the pre-eminent example. When coupled with a declining demand, the costs of production increase and the yields per acre decline, a surplus is inevitable, especially in the face of world competition.

But in the realm of food, there is no such thing as surpluses in a world where three quarters of the population suffer from malnutrition and a quarter of it is born and dies without ever having had enough to eat for one day of its life. There is no such thing as surpluses in a Nation like this where, despite potentially great agricultural resources, 40 percent of the population suffers from malnutrition either because of ignorance or because it cannot afford to buy high quality protein food. There is no such thing as surpluses; there is only poor distribution and prices which

are too high, and the prices are high because of a poor agriculture and declining yields per acre along the whole range of food and feeds.

Never in the history of the world has the folly of the "surplus" theory with regard to food been so tragically exposed as at the present time. While half of the world starves we are experiencing actually shortages in this country. The truth is that if our government representatives and officials spent half as much time on better production and better distribution of food commodities both here and abroad as they spend in patching up price regulations, tariffs, and parities, we should have a market both in this country and in the world which would consume at good prices to the farmer much more food than we can possibly produce at the present time. There could and should be some system by which the food of the world can be distributed properly, either by direct barter or through the use of exchange, with economic advantage to all concerned. It is one of the things which should concern our State Department, our Department of Agriculture and most of all, perhaps, the United Nations organization. To talk of agricultural food surpluses in this country or in the world is absolute nonsense. It is an excuse made by politicians who seek to buy their votes with the use of taxpayers' money and who have not the brains or initiative or energy to find the true and fundamental solution—better distribution and greater production per acre.

Those who talk of surpluses overlook nearly always the factor of high prices and their constricting influence upon markets. In other words, with beefsteak at 25 cents a pound as against 85 cents or a dollar a pound, the consumption would increase at least twenty times and it would be under existing conditions impossible for the farmer or cattleman to satisfy the demand. The same is true to a greater or less degree of all foods.

Certainly, under existing agricultural conditions, costs of food can scarcely be reduced overnight without disaster to the farmer, but that is so because it costs far too much per acre to produce a bushel of corn or a pound of meat. The change cannot be made overnight. We have made a good start in certain areas of the country but a really efficient, profitable and prosperous agriculture without subsidies and such panaceas can only be achieved over a period of years.

Since the Civil War the economic history of the Nation has been largely that of violent booms and violent depressions, violent inflations with short periods of doldrums in between. There has never really been a period of genuine and stabilized prosperity in which the farmer, the business man, the manufacturer could plan with any certainty for more than a couple of years ahead. Such a stabilized prosperity is what we need and only abundance, low prices and a stabilized purchasing power for the dollar will give it to us. All that, of course, is based upon the proper care and employment of our real wealth and natural resources. The money will take care of itself.

In our basic triumvirate of agriculture, labor and industry, the best

place to make a beginning is with agriculture. In an agriculture such as is practiced in Denmark, Holland, Belgium and France with a hundred percent production per acre, there is no such thing as a poor farmer, even in bad and disturbed times. The agricultural wealth and solidity of these Nations lies largely behind the fact of their stability and rapid recovery as compared to a Nation like the United Kingdom, which lacks both the real wealth and the purchasing power of a sound and productive agriculture. If we had in this country as efficient land use as in these Nations the cost of food and of other agricultural commodities could be reduced as much as 30 percent or more and the farmer would be making 20 percent more profit than he is making today. It is largely a matter of production per acre.

Subsidies, tariffs, parities, price ceilings, bribes to agriculture—all of these are makeshifts which deal with effects rather than causes. They solve nothing but only continue to undermine our prosperity and living standards. Because of the gravity of agricultural conditions at the present time, some of these measures must be continued in one form or another. Some of them must be continued so that the farmer can be helped to help himself. But in the long run they are no more effective than a plaster placed on the outside of the stomach to cure a stomach ulcer. The real answer is the stopping of floods and soil erosion, either by wind or by water, better and more productive grazing lands—and a better and more productive agriculture—in short, abundance with low production costs and the guaranteed security which comes of high production per acre. What we need as a Nation is dollars that buy more and more for everybody—farmer, industrial worker, business man. We shall only get that through abundance in all our production—agricultural and industrial. What we need is corn at 50 cents a bushel with a good profit margin rather than subsidized corn at a dollar a bushel produced at a loss to the farmer. There is one way to get all this and that is through the preservation and restoration of our greatest source of real wealth—the soil—through better land use.

To conserve the soil and use it for economic production can contribute to a higher standard of living at home and abroad.

Soil Improvement for a Satisfactory Food Supply

IDE P. TROTTER, Director, Texas A. and M. College Extension Service

SINCE this conference is devoted to planning, it seems to me exceedingly significant that today, all over the world, important persons are desperately engaged in planning on ways and means for securing and distributing food. A global famine of epic proportions is in the making. World leaders have made it very clear that only by preventing this famine may we hope to establish or maintain peace.

My institution, Texas A. and M. College, and the organization I represent, the Texas Extension Service, are both vitally interested in and responsible, with other agencies, for developing and disseminating information on the production, distribution and use of our food supply.

When we face the facts of our present food problem, we cannot avoid the conclusion that, for one reason or another, we have a serious underproduction of the basic food and feed products to meet the world's immediate needs. To be sure, world needs have expanded beyond the prewar level. Many parts of the world have suffered from drought and from loss of manpower, livestock and equipment—the aftermath of the war.

I do not need to apologize for American agriculture in this connection. The records show that in the years just prior to and during World War II, our farmers and ranchers produced far more of the basic foods needed by humanity than any of us could reasonably have expected. And, in common with many other parts of our economy, agriculture operated under the handicaps of manpower, equipment, transportation and supply shortages. I would like to point out, however, that from the cold, practical point of view, American agriculture today could sell far more than it is producing. We have greatly increased production in the past few years but now we have apparently reached the limit of our capacity to produce under present soil conditions.

For example, right now we are hearing a great deal about the shortage of livestock products. When we begin to study that situation, we discover that livestock producers do not have enough raw materials for the production of livestock. These raw materials, of course, are feed and pasture.

We find the same picture if we look at the chicken and turkey situation. We learn that many operators are cutting down production because of the shortage of grain supplies. The prices of such feed supplies as do exist are such as to make their chances for profitable operation very doubtful and there seems no certainty that feed will be available later. In the face of this situation, the price of turkey hatching eggs collapsed not long ago. Fewer turkeys are being hatched and raised because feed for their production is not in sight.

The same kind of shortage appears in almost every kind of livestock feed, both roughage and concentrates. Strenuous efforts have been made to induce farmers who have supplies of corn to put it on the market. The farmers have been understandably reluctant to do so because it was doubtful that they would be able to secure any other type of concentrate feed for the maintenance and finishing of their livestock. The pressure of food and feed prices against the ceiling set for their control and various efforts made to short-circuit the price control measure, as reported daily in the press and on the radio, all indicate a much higher demand for food and feed products than can be satisfied by the supply on hand.

We are in short supply of another type of feed, and that is in high quality pasturage for all classes of livestock. This shortage is less spectacular because pasturage as such does not come to terminal markets nor is a price quoted for it on the exchanges and trading marts of the world.

We know that even in the case of our present high, but not high enough, production of food and feed, there is still much to be desired when production per acre and production per man hour is considered. A great deal of this low production is caused by attempting to grow food and feed, year after year, on soils which are incapable of high production. We call these "poor" soils. They may have always been poor soils but in the main they are soils which have been made poor through mismanagement.

I said that American agriculture had compiled a marvelous record of production during the war years, and that in the face of great difficulties. And yet I think we must agree that, for the Nation as a whole, the weatherman has been remarkably good of late. While we are thankful for the generally favorable weather situation of the past few years, let us not forget that Old Man Average is a very hard man to beat. The records show that seasons and weather conditions do vary from good to bad and therefore we must have every reason to believe that drought and unfavorable seasons will come again. When they do, they will hit all the people engaged in agriculture, but they will hit hardest on the poorest soils and the poorest farms.

A poor and unproductive soil, wherever it may be found, is partly responsible for our lack of adequate production at the present time.

I wish now to present the thought that one of the most basic types of planning we can do, not only in Texas, the Southwest or the United States, but also throughout the entire world, is planning for soil improvement on a grand scale. We need this planning not just to avoid shortages such as we are now experiencing, but to make conditions more satisfactory for attaining and maintaining peace in the world in the future.

Here are four ways in which soil improvement tends to make possible a satisfactory food supply: (1) By a greater total production; (2) By making production more economical; (3) By providing production of a higher quality; (4) By a greater certainty of production.

To attempt a program of soil improvement in search of such laudable objectives is indeed a big job and one worthy of the thought of far-sighted planning groups. Its accomplishment will require the best that is in all of us. It is a job that will require understanding, imagination and united effort. This united effort will have to be on a much larger scale than we have previously recognized. Therein lies our opportunity and our challenge.

I would like first of all to say that in spite of all that we may hope for in the future from the agricultural scientists, we must give them credit for the fact that we now know a great deal more than we are making use of. There is enough known now about soil improvement to enable us to produce on the acreage we are now operating enough to provide a full diet to all the hungry and starving people of the world. We not only have the scientific facts, but we have enough of the practical experience and the *know-how* to put these scientific facts to work. If we want greater total food production we must work together to help farmers throughout the entire world make better use of their time and resources. Our job is to help organize a large-scale, a united effort on the part of business, professional and technical people in support of the efforts being made to put these known practices into effect. They must be put into effect on more and more farms. They must help the farmer increase his production per acre and per hour.

When we increase production per acre and per hour, we gain our second point, that of making this greater production more profitable to the farmer and more economical to the consumer.

But greater production and more economical production alone do not answer all of our needs. Our third point was the need for a higher quality of production. Some of our agricultural products grown from poor soils do not have the value they were once thought to have. We know now that all bales of hay are not the same. Some are highly nutritious and others are merely a coarse filler. Livestock will grow and thrive on one type of feed while they slowly starve on an equal weight of another. The quality of a product is its power to nourish the man or the animal, and this power is very largely the product of the character and fertility of the soil on which it grew.

Our fourth benefit to be gained from soil improvement is that of greater certainty of production. A fertile soil makes for more efficient operation of every agricultural process. Seeds germinate more rapidly, plants mature earlier, diseases are less damaging, resistance to drought or poor seasons is greater, and even insect damage is reduced. The better the soil the more certainty of return for time and effort on the part of the producer and the greater assurance to the consumer of a sure supply of food at a reasonable price.

If you agree that soil improvement on a grand scale is needed for first, greater production; second, more economical production; third, a higher

quality of production; and fourth, a greater certainty of production, then you want to know how such high goals can be achieved.

My answer is that we have enough information to make rapid progress. We know a good deal about how to use that information. What we must do is to put that information to use on a bigger scale than ever before. We have a long history of the development of teaching improved practices in agriculture here in the United States and particularly so here in Texas.

This is how the Agricultural Extension Service operates through its county agricultural and home demonstration agents, and a little of why we work as we do. During the early part of this century, agriculture had many troubles and a shortage of food and feed crops was feared. As far back as 1901 Professor Seaman A. Knapp and B. T. Gallaway, then Chief of the U. S. Department of Agriculture's Bureau of Plant Industry, established a number of demonstration farms in the Gulf States to test out Dr. Knapp's theories of the advantages of diversified agriculture.

It was clear that the basic facts for any general change in agricultural practices would have to be determined on farms or experiment stations operated at public expense. It was equally clear that farmers would adopt the improved practices very slowly. The conclusion was that the improved practices must be proved on the experiment stations but must then be demonstrated on farmers' farms under practical farm conditions. Once the practice worked there, both those farmers and their neighbors would have faith in it.

Two years later, in 1903, Dr. Knapp took this idea up with the business men and farmers at Terrell, Kaufman County, which is just east of Dallas. A committee of eight men was formed, we are told, and it put up a fund of $1000 to protect any farmer who might lose money in trying out Dr. Knapp's new practices. Walter C. Porter voluntered to conduct the demonstration on his farm. The object was to prove that cotton could be produced profitably in spite of the boll weevil which was then the uncontrolled scourge of the Cotton Belt and that diversified farming would reduce the risk of any farming venture. In spite of a heavy boll weevil infestation and damage to other crops from wind and hail, the 70 acres farmed under Dr. Knapp's direction returned Mr. Porter a profit of $700 above the community average.

Thus was established, not only for Kaufman County and Texas, but to a large degree for the United States, the fact that a carefully conducted demonstration on a farm was the most effective means of influencing farmers to change their practices for the better. This demonstration method has been used through the intervening 43 years to take to farmers and ranchers many thousands of individual practices which have greatly affected our agricultural operations and increased their efficiency. Today, we know of no better means of helping farmers to understand and adopt soil improving practices such as we are advocating.

The way to build a soil and improve it for higher production of better quality food is about as follows:

1. If the land needs drainage or terracing, that must be taken care of first.
2. Fertility, in many cases, must be restored by the addition of needed food elements, such as phosphate.
3. Crops must be rotated. That is, we must not have the same crop on the same field year after year.
4. The rotation system must include some close-growing crops and legumes. For example, the recently organized Harrison County Soil Improvement Council . . . east of Dallas next to Louisiana . . . has recommended the following four-year rotation: first year corn, followed in the winter by vetch; second year, cotton, followed by winter oats; third year, the oats are harvested and followed that summer by cow peas; and the fourth year, sweet potatoes or other truck crop. On the fifth year, the process is started over with corn as in the first year.

Such good soil improvement methods fulfil our goal of greater production. In East Texas last year, on forty Extension Service Farm Unit Farms, corn averaged 29 bushels where the crop followed a phosphated and inoculated legume the previous winter. A yield of only 18 bushels an acre was obtained without this soil improvement practice. Phosphate and legumes brought a 61 percent increase. If we want a further increase in yield of corn in East Texas, we have an approved method for doing that also. Farm Unit Demonstrators who applied phosphate and turned under legumes and then added ammonium nitrate to the corn brought up their yields an additional 22 percent.

Grain sorghums were likewise increased from two tons to three per acre when the crop followed good soil improvement practices. That was an increase of 50 percent.

This same type of increase in food and feed crops following good soil improvement practices can be multiplied over and over again thousands of times throughout Texas. And fortunately they are being utilized in many, many areas, but not yet enough.

What is not so well known is that these soil improvement practices increase not only the yields of our crops but also the quality of our food and feed crops. It has been scientifically established that crops grown on poor soils are poor crops, poor in the sense that they lack certain elements in the same degree that these are lacking in the soil. Conversely, soils rich in plant food elements produce crops rich in these elements.

Some years ago our scientists found that cattle along the Gulf Coast did better when phosphate, usually in the form of bone meal, was added to their ration. They had a stronger bone, they were thriftier and heavier. Then the scientists hit upon adding the phosphate directly to the soil; the grass produced on this phosphated land had an increased phosphate

content and the cattle grazing upon it showed the same condition as those who had phosphate added directly to their ration.

Probably the most widely known experiment of this type is that of the King Ranch, where phosphate has been used to increase ranch profits. Phosphate was applied directly to the range land, not on small experimental plots, but in blocks of hundreds of acres. Adjacent blocks were left untreated and the entire experiment was carefully conducted on strict scientific principles. Here is what happened: cows on the phosphated range continued to increase body weight, they produced a 100 percent calf crop, the calves put on weight rapidly . . . and more cattle were supported on a given acreage. On pastures not phosphated, cows actually lost body weight during the first four years of the experiment, and their present calf crop is only 83 percent.

With this outstanding and much publicized work at the King Ranch as a basis, we can grasp something of the possibilities of greatly increased production from our pasture and range lands through large-scale soil improvement. This opportunity is a very big one. In Texas alone we have 105 million acres of pasture and range land. It makes its return to agriculture and the Nation through the grasses it produces for harvest by livestock.

The possibilities of improving the total yield and the quality of these grasses are apparently unlimited. When we add fertilizer such as superphosphate to our pastures here in the Southwest where dallis, bermuda, buffalo and carpet grasses grow, one of the first things we notice is that our livestock tend to graze more often, and frequently exclusively, on the fertilized areas. This sometimes leads people to think that the fertilizer has done little good because the fertilized grass is short while the unfertilized grass is allowed to grow large. The thoughtful farmer, however, observes that if his livestock can recognize where he put the fertilizer and likes it that much, it must be worth while. He reasons that what the cow likes and will choose of her own free will must be good for her.

This is quite true. The more technical reasons may be found in a recent progress report from the Texas Agricultural Experiment Station, which tells of the result of a three-year test in phosphating pastures. As a result of these experiments it was proved that the phosphate content of bermuda grass was increased by 34 percent, buffalo grass 33 percent, dallis grass 18 percent and carpet grass 13 percent. This means that every bite of such grass that a cow gets is stronger in minerals. The cow knows somehow and will search out and find the one acre of fertilized pasture in the midst of a hundred untreated acres.

But, in addition to this increase in the mineral richness, the use of phosphate also increased the *total* growth of grasses by about 75 percent. While all this is being accomplished, we have still another gain from pasture improvement and fertilization. It has just been recognized and

it is equally spectacular and profitable. This has to do with the increased protein content of improved pastures.

If you have talked with a livestock man in the past year or so you must have been impressed with the seriousness of the protein feed shortage. Here in the South and Southwest we have been lucky in the past because we had a large supply of an excellent protein concentrate in the form of cottonseed meal and cake. Unfortunately, this is no longer available in adequate amounts. Some fear that it will not be available in adequate quantities for some time in the future in view of our lowered production of cotton and of our high livestock population. Ways and means of increasing our protein supply are, therefore, exceedingly important.

Soil improvement practices really pay off in these times of protein shortages. We have just received the reports of an Agricultural Experiment Station project carried on near Beaumont, Texas. The results are that each cow received from the grass on phosphated pastures there the equivalent of one pound of cottonseed meal per acre per day over that of a cow grazing on unphosphated pasture.

Many livestock men figure that an animal needs about a pound of cottonseed meal per day as a protein supplement when she is on pasture. Now this, of course, refers to an ordinary untreated pasture, such as we have depended upon in the past. But in the case of the phosphated pasture in the Beaumont tests, the cow received that extra protein out of the grass she was eating. This kept the cow growing satisfactorily and saved the cottonseed meal for other less fortunate cows.

The end result of the Beaumont experiments, so far as the protein content of the grass is concerned, is an increase of 34 percent in the protein content of dallis grass, 97 percent increase for bermuda grass, and 144 percent for carpet grass. And the increase in total production of forage was 193 percent!

The records of the Experiment Station indicate that an application of 100 pounds of 20 percent superphosphate per year will, on most pastures, supply the mineral needs of the plants and furnish a better feed to the animals grazing on that pasture. The 100 pounds need not be applied annually but may be spread at the rate of 400 pounds per acre every four years. Now we must remember that bermuda grass is the most widespread and dependable grass on much of the humid area of the South. If 100 pounds of 20 percent superphosphate per acre per year will increase the protein content of bermuda grass at Beaumont, Texas, by 97 percent, it will very probably show a very sharp increase in other sections of the South. And I submit that an application of 100 pounds of superphosphate is a very economical way of buying that much protein supplement.

We may sum up the experimental findings on phosphate to date conservatively by saying that a proper supply of phosphate applied to

pasture grasses in areas of Texas where rainfall is adequate will give our cows 20 percent more protein and the same of phosphate in every bite they take; and that in addition they can get almost twice as many bites per acre.

So much for the experimental findings. Now let us see how all this works out on the farm. Let us take the case of Mr. Jack Martin, a Farm Unit Demonstrator near Gainesville, Cooke County, some 60 miles north of Dallas. You cannot, of course, raise and finish animals without protein; yet Mr. Martin marketed two litters of pigs without buying an ounce of protein supplement. He did it by growing his protein in the form of green oats and clover on phosphated fields. Twelve pigs were farrowed in May of 1945 from two sows which were grazing on hubam clover; the pigs grazed on it until August 1st with additional feed of ground oats and wheat, both grown on the farm. By October 1st there was a good growth of green oats which furnished the necessary protein to supplement a grain ration of milo maize, also grown on the farm. These 12 hogs were sold at 210 days and they averaged 268 pounds when marketed; this was very good hog production on an economical home-grown feed supply.

In conclusion, I wish to repeat that soil improvement is in my opinion an essential for a satisfactory food supply in the future. We know many things which could be done immediately. We will learn many more things which can be done in the future. At the moment our task is to so plan and organize as to make the maximum use of the things we do know through existing organizations and by united effort.

The American Planning and Civic Association can have a large influence on focusing the minds of business men, civic, social and political leaders on the problems and on the possible ways of solving them. We are now in a stage of trying to apply in a united effort the good soil improvement practices which we know to be sound and which will bring about better income and more and better food for everyone. We want every resident of every city to understand that they can have a part in encouraging such a soil improvement program. Their business organizations, their chambers of commerce, their Representatives in the Legislature and all of us can have a part if we realize that our future welfare depends pretty much on getting the job done and getting it done before too late.

We must recognize that our soil and its ability to produce the things that we use for food and feed is our Nation's or any other Nation's greatest basic and permanent resource. We have allowed it to become less productive than it should be. We must conserve and improve it and we must all work together for that purpose. It is my privilege to challenge us to attack this program wholeheartedly and effectively.

A Railroad Aids Soil Conservation

JOHN T. STINSON, Retired Director-Agriculture Development,
Missouri Pacific Railroad, St. Louis, Mo.

NO ONE could have spent as many years in agricultural development work as I have and not be especially pleased at an opportunity to confer with you who are engaged in planning, because development of any kind and especially farm development has its roots in planning.

And I find a very great pleasure in being the representative of Mr. L. W. Baldwin who for the last score of years has been the dynamic and competent chief of the Missouri Pacific Lines. While I feel what I think is a justified pride in the fact that the Missouri Pacific has contributed greatly to the farming prosperity of the States it serves, the credit for that work is due to Mr. Baldwin who believes that planning for a better and more prosperous country is a solemn duty, not only as a railroad executive but as an American citizen.

Tangible results of the plans sponsored by Mr. Baldwin are everywhere apparent as one rides over our 10,000-mile railroad system. But while tangible results are important I know him well enough to know that he, and other railroad executives like him, find their greatest satisfaction in the fact that their efforts to make good railroads better ones, and thus increase the efficiency and the scope of their service, have contributed immeasurably to making this a better Nation—a Nation of happy, well-fed, intelligent, and purposeful people.

But even in spite of the praise bestowed upon the people for the effective part played in winning the war, I fear the public takes its railroads too much for granted. Yet no one can question the statement that prosperous farms, well-stocked ranches, busy factories and countless modern and progressive cities all came into being because the railroads provided the mass transportation that alone make growth and development of all kinds possible.

I believe our railroad industry is the most convincing example of the success of our American system of private enterprise. And I like to think, too, that the American people will, in time, insist upon public policies that will enable them to keep on operating under that system and enable them to stay clear of any threat of socialization.

I am not going to talk about the problems of the railroads but I do want to say that you who are so interested in plans for the future could do no better public service than to interest yourself in those problems, and to do all you can to help shape public policies so that the railroads will have a full and fair opportunity to keep on doing the constructive, helpful work they have been doing for about a century.

One of the brightest pages in the story of the railroads is the constructive work done by them over a long period of years in helping stimulate interest in better farming methods. I do not mean to say that the

railroads are responsible for all the agricultural development that has taken place in this country but certainly they have had a large part in it. It was Mr. Baldwin's interest in better farming that directed our railroad's attention to soil conservation and its efforts to stimulate greater and more general thinking on the need for saving our land.

Many of you, I understand, are primarily interested in planning bigger and better cities—cities that will be better, more healthful, more beautiful and more enjoyable cities in which to live, and in which future generations may be reared. But, may I say that it will be futile to plan better and more attractive cities unless a very great deal of thought is paid to planning ways and means of preventing the wanton waste of farm lands—of preventing lands that could be productive from becoming hopelessly non-productive! Mr. Baldwin expressed it well when, in one of the many statements he has made on the subject, he pointed out that all our national wealth comes from the soil, and said that "only to the extent that we conserve our soil can we be sure of keeping this great country 'the Land of the Free'!"

All of us can in some way have a part in this worthwhile effort. We should endeavor to interest business men, bankers, teachers and students in realizing the importance of land protection, and we should make every effort to interest farmers and land owners in taking advantage of the opportunities that exist to carry on soil conservation in a systematic, organized manner through the formation of conservation districts. That was the purpose of a booklet issued by the Missouri Pacific Lines a year ago and for which there has been such a demand as to have necessitated two reprintings. All of our people are keenly alive to the need for more interest in the subject. They do all they can to impress everyone with the fact that promotion of soil conservation is a patriotic duty.

General interest in saving our tillable lands should be more acute now than ever, for it has become our obligation to prevent widespread starvation that will be inevitable without our help. This obligation should be sufficient to make every thinking person eager to stop the needless erosion of our farm lands.

Erosion deprives thousands in both city and country of an acceptable standard of living, reduces income and buying power, lowers our production of food, feed and fiber, and even forces many people from their homes. Soil losses not only represent losses of the farmer's and rancher's capital assets, but losses to those engaged in commerce, industry or transportation.

In one Southwestern county where erosion is very active, the value of farm lands and buildings declined drastically from $18,491,000 in 1920 to $3,933,000 in 1940. Remove all the other factors that may have influenced this shrinkage of values, and erosion still remains the dominant factor. If you are a merchant, a banker, or a manufacturer, apply these figures to your business. What would you consider the condition of your

store, your bank, or your factory if your capital assets had declined more than 78 percent during 20 years?

Look again at this Southwestern county. Between 1920 and 1940, the number of farms dropped from 3,781 to 2,792, a loss of 989 farms. At the same time, the cropland shrank from 218,000 to 92,000 acres—a loss of 126,000 acres of crops. And soil conservation surveys made by the Soil Conservation Service show that of the 92,000 acres then in crops, 14,000 acres were eroded so severely that they were no longer suitable for profitable crop production and should be retired to permanent vegetation. Assume that each of the missing 989 farms originally had supported an average-sized family of five members, you have 4,945 men, women, and children who were forced to find new homes in other counties or in other States. Certainly there was no new land for them. The day is past when new lands can be had for the homesteading.

People who still have their farms are affected, too. When the value of farm lands and buildings shrinks more than fourteen and one-half million dollars in one county, it is obvious that tax revenues to maintain schools, roads, and other public services shrink in proportion, unless the tax rates on the remaining land are greatly increased.

When topsoil is washed or blown away, the remaining soil is less productive and more susceptible to erosion. As erosion progresses, crop yields decline in proportion. Farm income, buying power, and living standards are lowered. Trade is lost to businesses in villages, towns, and cities dependent on a profitable agriculture.

When the Arkansas River went on a rampage in 1943 as a result of excessive rains on its unprotected uplands, the damage was estimated by the Soil Conservation Service to be at $127,000,000 in Arkansas and Oklahoma. Damage to property was $37,500,000; damage to land by erosion or deposit of sand and other debris on 2,500,000 acres of lowland totaled $12,500,000; erosion damage to 25,000,000 acres of cultivated uplands was $75,000,000; loss by deposition of erosion debris on crops on 188,000 acres of cultivated uplands amounted to $2,000,000. Drainage systems developed to increase the productivity of fertile bottomlands were damaged or ruined by sedimentation.

The Missouri River is notorious for its floods, and the landowners along the lower reaches of this river in Missouri know the fury of the waters that rush pell-mell from the farm and range lands of eight other States.

Erosion's terrible toll is a needless burden. Erosion can be controlled. Soil conservation already has been proved to be practical, economical and profitable. This proof comes from thousands of farmers and ranchers who have tried it, and by experiment stations which have studied the cause and cure of erosion.

Communities where soil conservation programs have been established by farmers, with the help of organizations such as the one of which

you are a part, have taken on a new lease on life in their agricultural activities. Conservation farmers have bigger yields of a greater variety of crops. That means more income, more money to spend. Where conservation districts have been organized and where farmers have adopted soil conservation methods, storekeepers will testify that there has been a marked increase in local sales to farmers. Schools and churches have been repaired, repainted, or rebuilt, and as a result these communities have become better places in which to live, work and rear a family.

As of February 15, 1946, soil conservation districts have been established in 46 States which have enacted a Soil Conservation Districts Law. These districts include approximately 808,106,456 acres; 3,192,445 operating units and 3,658,713 farms. In addition to these 46 States, there has been recently enacted a Soil Conservation Districts Law in Massachusetts. According to figures compiled May 15, 1945, the Lone Star State at that time had 123 soil conservation districts organized and ready to operate. These districts include 108,000,000 acres or 64 percent of the acreage of the State. There are 488 soil conservation districts in the States served by the Missouri Pacific Lines, or more than 30 percent of the total for the entire United States.

A complete soil conservation program provides not only for control of erosion but also for maintenance of improvement of soil productivity. Enormous quantities of plant nutrients are lost through erosion, but other factors also affect the soil's productive capacity.

H. H. Bennett, Chief of the Soil Conservation Service, has defined soil conservation farming as "common sense farming with scientific methods." It involves: (1) sound land use; (2) the right combination of conservation practices, including drainage and irrigation if necessary and practicable; (3) maintenance and improvement of soil productivity; and (4) economically sound conservation farming.

No one questions the need for soil conservation, and especially no one at all familiar with the facts. But there are some who would change the present highly efficient way of saving our farm lands and make conservation the sole duty and the responsibility of the State under some so-called authority. To my way of thinking that is not the American way of doing it. I think the American way is the one whereby those communities that want soil conservation help can have it, provided they show enough interest to form districts, and provided those who will be immediately and personally benefited are willing to put forth their own efforts to save their own lands.

This system is working and will continue to work if we Americans continue to exercise our brains and our individual and collective initiative, if we continue planning and continue to be willing to work not only for our own salvation but for the salvation of future Americans who, we hope, will cherish the heritage of freedom and liberty and who will perpetuate the ideals that have made our country great and powerful.

Influence of Soil on Human Health

JONATHAN FORMAN, M.D., Professor of the History of Medicine and Lecturer on Allergy, Ohio State University, Editor of the Ohio State Medical Journal, Vice-President, Friends of the Land, Columbus, Ohio.

AMERICAN medicine exists for the care of the SICK. It has nothing to do directly with HEALTH. The prevention of sickness is largely an individual matter from here on. Communicable diseases and epidemics are definitely on the decline. Our people are being educated to eradicate them. Diphtheria, tuberculosis, whooping cough, and many others can be wiped out in one generation when public education is complete. Socially minded persons in all parts of our country are spending altogether too much time and energy in planning how to take BETTER care of MORE sickness. They have come to speak of sickness as though it were health. Even the sickness insurance of the various social security bills have always been incorrectly called "Health Insurance." They have nothing to do with health but do in fact propose an indemnity of a kind for those who are sick at the expense of those who stay well. All such activity is attacking the problem from the wrong end. We must stop sickness and protect our health. We can do more toward keeping our people healthy by using our energy to improve their living conditions, and to teach them how to take proper care of their bodies than we could ever possibly hope to do by attempting to provide an increasing amount of medical care to ease the damage to their bodies after it has once been done by disease.

While theoretically these efforts are not opposed to each other, the limitations of governmental and personal spending make them for all practical purposes mutually exclusive.

Health is something much greater than being able to keep out of a physician's office or a dentist's chair or being able to get up in the morning and get to one's work. Health should be a very positive thing. It makes for a much longer and a more happy life. Once lost, however, robust health with all of its joys and buoyancy can never be regained. Organic disease processes may be stopped but they can never be reversed. Disease leaves its scar on the body. The tissues can be healed but they cannot be restored.

By training and social discussion, medicine has to do with disease and not with health. Medicine is dedicated to the patching up of sickly bodies in the hope that the physician can give relief from pain, possibly stop the spread of an infection, and thereby salvage a few more years of impaired living for an otherwise doomed body. Such service is a noble and humanitarian gesture in keeping with the best traditions of our race, but it has no more to do with the maintenance of real health than do the services of a minister in times of sickness. So in fact, we must come to look upon the maintenance of health as a cultural problem, as a problem

in personal and civic planning. As far as perfect health is concerned, I agree with Ralph Borsodi—that cultural habits as a whole, and those of health in particular, can be changed under the impact of an education designed to find a solution to the fundamental problems of living. Here is where our modern educational system falls down almost completely. There is all too little in that change for children to learn from us of the present generation, either in school or out, that will promote and maintain their health.

Better medical facilities and wider distribution of them will not overcome fundamental causes of our disgraceful sickness and death rate (but remember, however, that these rates are still much lower than those of any other great Nation in the world today). It is, therefore, further improvements in these rates and not a social revolution that we are seeking.

The prevention of infectious disease is a possible health problem in which, through our local, state and Federal authorities, each of us has a stake. Lack of proper sanitary facilities has been responsible for more illness than any other single factor. It has been said with considerable truth that the most important public health measure that has ever been introduced was placing the modern toilet in a warm bathroom and connecting it to a sewer. If we were to promote a wider installation of sanitary facilities, both in the city and rural areas, and were at the same time able to teach our people to use such an equipment regularly, the health of America could be maintained at a much higher level than it now is.

We have a most remarkable and satisfactory decline in infant mortality since the pioneer days, but when one looks at the annual figures of this decline one is struck with the fact that it correlates with pasteurization and proper refrigeration in milk, especially in the home. All this only confirms what we have said—that health is a cultural as well as a personal problem and is not and never will be the direct responsibility of the medical profession. It is the responsibility of the individual to practice the best possible personal hygiene. It is the function of the State to teach each of its citizens in a motivating manner what is best in personal hygiene.

A large part of the sickness in this country is directly due to the neglect of their bodies by many of our citizens. They seem to have no conception of the simplest rules of hygiene. I repeat, education in these matters is one of our primary needs. Leaving out of this discussion the apparent lack of knowledge on the part of the American parent concerning the proper methods of the care and the rearing of children as well as the bad effects of overcrowding with its attending bad housing—all of which is more important to the people than any pills or medicine, we come to the discussion of the relation of nutrition to our health.

We are what we eat. Scientific research made great contribution to

human welfare when it began to uncover evidence that improper food is the underlying cause of many diseases. Not only organic disease but also many functional disorders in both animal and human beings are so identified. Sickness brought on by deficient foodstuffs was for the most part found to be chronic and crippling to both mind and body, creating a large part of the social problems of chronic illness, delinquency and mental deficiency.

We are now certain that some specific diseases are due to definite and specific deficiencies in our diet. We are also beginning to appreciate the fact that millions of our people are suffering from a lack of proper food. Such people do not exhibit the signs of positive health. In fact, many of our fellow citizens have come to tolerate poor health. Some of them almost *enjoy it.* They have no conception whatsoever of how it would feel to be physically fit. They have lost much of their natural vitality. They have greatly increased their susceptibility to infections of all sorts. Their dismal bodies provide the modern swamps from which spring our epidemics. How to protect ourselves from sickness by restoring these chronically ill persons back to a reasonable degree of health, at least to one safe for the neighbors, is our fundamental social problem. This is a food problem and can never be solved by medicine.

Science and Nutrition. The science of nutrition is fully established today as one of the chief branches of preventative medicine.

If our people would only make use of their knowledge of nutrition they could add at least seven years to the length of their lives. These years would be inserted at once into the vigorous part of that span and not tied to the end of their days to be spent in a wheel chair or on a government dole. Thus to extend human life, however, will bring new responsibility. The challenge to our intelligence then is not to add years to our lives but, more important, to add LIFE to our years. We have come to realize that sickness due to malnutrition is the largest single factor in the problem of our aged. In fact, if we cannot give our old people a continued active healthful and productive life until the very end of their existence, such as we already have the knowledge to do, then the social problems of these old people greatly threaten to overwhelm our economic structure.

In an attempt to meet commercial demands, more and more of our foods have been over-refined in processing and there has been a consequent loss of vitamins, minerals and other essentials. We can safely say that, if we wish to live longer and to be happy, we must eat foods in their natural states with all of their original flavors retained. Too much of the time we harvest, process and prepare our foods in such a way that most of the essential elementals are destroyed.

We look askance at the factory-like pace at which our cows and hens are made to produce. We wonder if the unfertilized egg is equal to the fertilized egg as an item of diet. We may wonder also about the nutrient

value of flesh that comes from animals that have been stuffed quickly for the market rather than allowed to graze on the open range. The question can be asked about turkeys and chickens just as well as about hogs and steers. If we are to be healthy we must emphasize the natural qualities of what we eat, not the extent to which the food has been refined or the degree to which its keeping qualities have been improved. To illustrate: the perverted tastes of our people and the search for keeping qualities have served as dual factors in producing white flour. White flour keeps so well because no self-respecting worm would care to try to live upon it. We derive a great number of our calories from sugar, a fuel of the lowest biological value. And most of us saturate with pure sodium-chloride. I challenge anyone to advance good reasons for the use of table salt if one expects to live long and avoid the destruction of his heart and blood vessels.

Our methods of dehydrating, freezing, canning, cooking, preparing and serving our foodstuffs must all be re-examined but it must be remembered that all of these things may have been properly attended to and our food may still be unsatisfactory. It may lack the elements that are essential to our health, because the food itself has been grown on soil which lacks the minerals which are either directly or indirectly essential to human health.

For the past five years I have had the opportunity of working with Ollie E. Fink, arranging and directing the ANNUAL CONFERENCES ON CONSERVATION, NUTRITION AND HEALTH, sponsored by FRIENDS OF THE LAND. These conferences have been designed to bring up to date and to summarize all that is known about the relation of the soil to human health. Each year as many authors on this problem as can be assembled have come to these conferences to contribute their share to a consideration of the relationship between soil and health. All of the information assembled thus far and all that competent authorities have been able to cull from scientific literature point in the same direction. All of these confirm the statement the FRIENDS OF THE LAND made in the Manifesto of organization—

> Evidence on this point is far from complete but the trend of accumulated findings is unmistakable. If the soil does not have essential elements in it, plants that grow there do not; nor do animals that eat those plants; nor do the people throughout a country who eat those plants and animals. Soil debility soon removes stiffening lime from the national backbone, lowers the beat and vigor of the national blood stream and leads to a devitalized society.

The National Park Service—The First Thirty Years

NEWTON B. DRURY, Director, National Park Service

The fact that it was thirty years ago, on August 25, 1916, that the precise signature of Woodrow Wilson was appended to the act that established the National Park Service gives us a reason, or at least an excuse, to look in two directions—backward, to review what the thirty years have brought; and forward, to appraise the task that lies in the future.

The establishment of the Service, though important in the history of the National Park System, was after all simply one event in the evolution of a program, the exact beginnings of which it is really difficult to determine with exactness. Perhaps we might consider that the first concrete step was the establishment under Abraham Lincoln, of the Yosemite Valley and the Mariposa Grove as a public park, carved out of the public domain. It happened that these lands were entrusted to the custody of the State of California, but the underlying principle—that of setting aside extraordinary scenery for enjoyment by the public—was to be found in an action that antedated the establishment of the Yellowstone National Park by eight years.

The Yellowstone National Park Act of 1872 not only marked the beginning of a Federal system of parks; for the first time in law a new principle of land management, which of necessity could be applied only to a limited number of areas, was enunciated. It was almost revolutionary, at that stage of our national progress, for Congress to provide "for the preservation, from injury or spoliation, of all timber, mineral deposits, natural curiosities, or wonders within said park, and their retention in their natural conditions;" and in its recognition of this degree of protection as necessary if the area was to function most satisfactorily "as a public park or pleasuring ground for the benefit and enjoyment of the people."

We have become so accustomed, during the past 30 years, to the fact that all the parks and monuments and other special reservations are under a single control, that it is not easy to realize what the situation was in 1916. The National Park Service was given the administration of the "several national parks and national monuments which are now under the jurisdiction of the Department of the Interior, and of the Hot Springs Reservation in the State of Arkansas." Because of the very lack of a single administrative agency having legal responsibility for park and monument areas, the Interior Department was one of three—the others being the War Department and the Forest Service—which shared that responsibility.

So it was with only a part of the total group of national parks and monuments that the new Service assumed its task—a gargantuan one, as we look back upon it and analyze it. The American people had to be

made acquainted with their possessions; and these, in turn, had to be put in shape to provide their visitors with a satisfactory experience in them. A national highway construction program was beginning to get under way; the year before, Mr. Ford had envisioned the possibility of his producing 300,000 Model-T cars in a twelvemonth and had astonished the Nation by doing it; Americans were on the move, and their needs had to be met in the famous places they had heard about all their lives but that comparatively few of them had had a chance to see up to that time. The parks had remained "horse-and-buggy" places long after the automobile was poking a venturesome hood into other out-of-the-way places all over the United States map; and their roads were pretty much of the "horse-and-buggy" type.

It was the great good fortune of the infant National Park Service that two such men as Stephen T. Mather, its first director, and Horace M. Albright, his right-hand man, were available to launch the many-sided program of needed development and promotion. Today, thirty years after "Steve" Mather took over, and more than sixteen years after his death, his is a name to conjure with; and the truth of Congressman Louis Cramton's tribute, "There will never come an end to the good that he has done," is affirmed with every passing year; while Horace Albright, thirteen years after his resignation as Director, remains a shining and militant defender of the system to which he made so splendid a contribution. He has been a busy business man, and a successful one, but he has never been too busy to take up the cudgel and to wield it with telling effect when he has felt that the situation demanded it.

The first Director knew that if people—all kinds of people—were to enjoy the great places that belonged to them, in a satisfactory manner, there had to be adequate provision for their accommodation in the parks. He considered it desirable that the physical plant be provided by the Government, but he found himself unable to obtain the needed funds from that source. Congress repeatedly refused to act. His only recourse, therefore, was to seek to interest outside capital in providing the hotels, lodges, cabins, eating-places, and other facilities that the public required. It took missionary zeal to accomplish that task; such an investment, looked at from a purely profit-making viewpoint, was generally considered a gamble, especially since the contract period could not exceed twenty years, in spite of the very substantial type of construction required, and the condition that prices were to be subject to Government control. Furthermore, many of the parks offered only a short period each year in which any substantial income could be expected. That Mr. Mather succeeded in attracting capital to take this risk was a tribute both to his capacity for establishing confidence in himself and his cause, and to the public spirit of many of those investors of the early days. There has been of late a tendency to be critical of some of the concessioners, without giving due credit for the pioneering that many of them did.

Only recently the appropriations committee of the House of Representatives included in its report on the Interior Department appropriation bill a sharp attack on the concession contract system of the National Park Service. As a matter of fact, we do not consider, nor has any director in the past considered, that this system represented perfection; there has been constant effort, under many difficulties, of which the chief has been the lack of qualified personnel to analyze these operations, to improve the type of contract under which essential services have been rendered. Effort has been made constantly to see that needed services were provided satisfactorily and at reasonable rates. By and large, the arrangements made have worked remarkably well. The public has been adequately taken care of, and, considering the volume of business done, there has been relatively little complaint. Requirements by the Service have been cheerfully complied with, in spite of the fact that some of the concessions have by no means been profitable ventures. Where profits have been made, it is the aim that a fair proportion should go to the Government. Some contracts, because of circumstances unforeseen at the time when they were made for the necessarily long term, may not have accomplished this fully; but as new contracts are made this objective is being kept in view, and we are trying to be guided by past experience. It should be remarked, however, that the purpose of these contracts is primarily to render good service to the public at reasonable rates, and not to make money either for the concessioners or the Government.

The initiation of an adequate program of modernizing the roads of the parks and monuments which the National Park Service took over in 1916 and of those which were steadily added to the system during the years that followed, was slow in getting under way. As a matter of fact, it took some time to accustom the Congress to the granting of appropriations to the new service that were large enough to permit it to do its job; and the general run of salaries, even for that day, was very low.

It was not until the spring of 1924 that the first fair-sized authorization of national park road funds was approved by Congress—a total of $7,500,000 for a 3-year period. Early in this period the task of constructing major roads in the National Park System was entrusted to the Bureau of Public Roads, an action that was based on the conviction that that agency, now the Public Roads Administration, could perform the task more effectively, with its specialized organization, than the Service could possibly be expected to do. This arrangement has now been in effect for more than two decades, with excellent results. It involves cooperation between the two agencies in route selection and design, in order to assure routes that are satisfactory for the expected traffic and that, at the same time, involve the least possible disturbance of the landscape. With the launching of two major parkway projects—the Blue

Ridge and the Natchez Trace, in the 30's—in which the landscape profession is wedded every foot of the way with that of the engineer, this cooperative relationship is being carried forward and tested on a type of project which is still in its pioneering stages.

Aside from the provision of necessary physical facilities, nothing, I believe, has done more to assure the people that enjoyment which the National Park System is intended to provide them, than the development of what has been variously called education or interpretation in the diverse areas that comprise the system. Space does not permit presenting the names of those who had a major part in the evolution of this program or the history of its development. Essentially, however, it has been a constant process of experiment and demonstration directed toward better public understanding, on the part of the visitor, of the natural phenomena or historic events exemplified in these areas. While the visitor has, and always will have, perfect liberty to "take it or leave it alone," every effort is made to provide the opportunity for that better understanding and to let every citizen know that he can have it if he wants it. Back of the work of the ranger naturalist and the ranger historian in the guidance of visitors and in stimulating and answering their questions; back of the museums, with their carefully selected exhibits; back of the publications which make available more detailed information than can be obtained readily by any other means; back of all these is careful research, carried on primarily to make this interpretive program more accurate and more effective.

As one looks back over what has been a momentous thirty years, certain events and developments stand out. The steady extension of the system by the establishment of new areas has taken place throughout the whole period as a series of noteworthy events; aside from the almost invariably notable character of the areas added, perhaps the most interesting feature of this expansion has been the establishment of a group of national parks in the East and South, which have thus given the system a truly national, rather than merely western, character.

The division of responsibility for administration of "park-type" Federal reservations that existed when the Service was established, and to which I have referred previously, was brought to an end in 1933. At that time, under the authority of the Reorganization Act which Congress approved early in the first term of Franklin D. Roosevelt, the national military parks and other areas of military significance, as well as certain historical monuments, which had hitherto been administered by the War Department, and the national monuments lying within the national forests, which until then had been administered by the Forest Service of the Department of Agriculture, were transferred to the jurisdiction of the National Park Service—an action which added immensely to the Service's concern with the historical type of reservation. These transfers, plus the new areas which have been established during the 30-year period,

have given the Service administration over more than five times as many areas as on August 25, 1916.

The orderly development of such extensive and varied areas as comprise the National Park System has required a highly specialized type of planning. This is represented by what was dubbed the "master plan," a name which seems to have been coined by former Director Albright some years after the procedure to which it applies had been established. Pioneered by the Service, it describes a procedure for planning, as far in advance as possible, for the structures and facilities each area is likely to require; and it bears particularly the imprint of Chief Landscape Architect Thomas C. Vint. The master plan of a major park is usually a bulky document. It not only shows existing roads, rails, structures, and other facilities but contains also the best forecast of technically qualified men as to what the future is likely to require, where facilities of various sorts should be placed, and what their logical interrelationship is. Thanks to the existence of such plans in 1933, the Service was ready to utilize promptly the CCC, PWA, and ERA forces and funds that became available in the period beginning in 1933 and ending with our entry into the war. Although it undertook much construction, it made few false moves.

Except for the fact that these have been conceived, in some quarters, to be plans rigidly adhered to year after year, regardless of changing conditions or demand, it would seem almost unnecessary to explain that they are thoroughly flexible and, in normal times, regularly revised in order to adapt them to foreseeable changes or to changes in progress. Perhaps the best tribute to the value of this type of advance planning was the wholehearted adoption, after a period of questioning and doubt, of this procedure by the various state and county and metropolitan park agencies with which the National Park Service cooperated during the 9-year career of the Civilian Conservation Corps.

The master plan represents the results of the cooperative effort of technically trained men in many specialized fields; it is one of the fruits of the technical organization within the Service which had its beginnings in the early days, and which has steadily developed throughout the whole 30-year period. Evolving from the early employment of a few landscape architects, architects and engineers, the use of technicians has expanded to include foresters, and various specialists in the natural sciences as well as historians, all of whom have a hand in determining the best ways in which any area is to be used and the best manner in which to provide for public use. The branches established in the Director's Office, and their equivalent in the four Regional Offices, reflect this evolution—with branches of engineering, plans and design, lands (involving broad scale land planning), forestry, natural history, including a museum division, and history.

Thirty years has also seen a considerable evolution in the Service's administrative organization. At its beginning, the system was almost

wholly western; the Director's Office was a comparatively small group; the early technical branches were headquartered in the West, close to the areas for which they did the planning. The gradual enlargement of the Service's concept of its functions and the increase in its responsibilities compelled a gradual increase in the headquarters staffs, and the transfer of its top planning and technical groups to Washington in the middle 30's. It also compelled the adoption of regionalization, in 1936, to permit the more efficient performance of duties laid upon the Service by the CCC and other emergency programs. At first, regional authority was limited to these programs, but a year later was extended to include regular service functions as well. By delegation of a considerable degree of authority from the Director's Office to the four regional directors, it is possible for the field areas—which the regional offices are intended primarily to serve—to obtain prompter action on many matters by men closer to and better acquainted with their problems than could be done from the central office. Headquarters for these offices are situated in Richmond, Virginia; Omaha, Nebraska; Santa Fe, New Mexico; and San Francisco, California.

Participation in the Civilian Conservation Corps program established an official relationship between the National Park Service and the state park agencies throughout the country which had already existed for many years on an informal and unofficial basis. This was an added responsibility which came under the directorship of the late Arno B. Cammerer, who succeeded Director Albright in 1933 and continued as Director during the ensuing seven years of extraordinarily heavy responsibility. In 1940 ill health prompted his resignation as Director. Director Mather realized that the States had an important part to play in the field of parks; he felt that the development of state parks should be encouraged; and he saw in this development a means of assuring the preservation and use of desirable areas which could not qualify for admission to the National Park System. Hence his leadership in the establishment of the National Conference on State Parks in 1926 and his long and active participation in its activities. Hence also the prompt assignment to the Service of responsibility for supervision of Civilian Conservation Corps work on state, county and metropolitan parks throughout the country. This at its peak, involved the work of 457 of the camps that were so familiar a feature of the forest and park landscape from 1933 to 1942. Since the development and use and management of state parks are concerned with so many problems that are common alike to them and to the areas in the National Park System, it was natural and fortunate for the Service, as we hope it was for the States, that Congress in 1936 added permanently to the functions of the Service by authorizing it to cooperate with States and their political subdivisions in planning their park areas and park systems. The relationship with others in the park field is one that we value highly. The cost of this cooperative

work was met out of CCC funds as long as the Corps continued in existence, and it was necessary to halt it almost completely during the war; but the 1946 appropriation act contained a modest provision for it which has made a resumption possible.

Cooperation with other Federal agencies, authorized in the same act, has become an increasingly important part of the Service's job, and has been extended to include actual administration of certain areas which are the primary responsibility of such agencies as the War Department and the Bureau of Reclamation. Thus, by act of Congress, supplemented by a cooperative agreement with the War Department, the Service is to administer the recreation lands surrounding Lake Texoma, in Texas and Oklahoma. Since 1937, it has had charge of the Boulder Dam Recreation Area in Arizona and Nevada; more recently, it was given similar responsibilities at Shasta and Millerton Lakes in California; and an agreement is in the making for the same kind of arrangement at Franklin D. Roosevelt Lake (Coulee Dam) in Washington. To these areas, very different policies of management are applied from those which govern areas in the National Park System. We are definitely concerned that the distinction between the two groups of areas be maintained and that the National Park System fully retain its identity and its character.

The growth of the system has resulted, naturally perhaps, however unjustifiably, in assertions now and then that the National Park Service was a "land-grabbing" agency. I believe it is correct to state that most such assertions come from those who for reasons of their own insist that the resources in the parks and monuments are, but should not be, "locked up." Whether it be timber, forage, water or mineral, they want a chance to exploit these resources. Perhaps the best refutation of the "land-grabbing" accusation is to be found in the history of the Recreational Demonstration Areas. These, which totaled more than 400,000 acres of land, were acquired in 1934 and 1935 with Federal funds, having been selected for the most part jointly by representatives of the Service and of the States on the basis of their suitability for recreational use by nearby populations, and they were developed at Federal expense. The National Park Service might have hung on to them. Yet it was the Service which sought, and in 1942 obtained, legislation authorizing the transfer to the States of such of these areas as were suitable for addition to their park systems. Under that authorization, 26 of them, containing nearly 165,000 acres, have been so transferred, while one, containing 61,359 acres, has become a wildlife refuge under Fish and Wildlife Service administration.

Actually, of course, the Service has been conservative in the acceptance of additions to the system, as a review of its history will show. It has consistently opposed many more proposals than it has ever recommended. In the 48 States, only 7/10 of 1 percent of the total area has been included in the National Park System. Of the 13,365,671 acres so

included, nearly a third is desert, or semi-desert, and several million more acres comprise high mountain country of very low commercial value. And it can scarcely be contended, of a system which will probably be used by more than 25,000,000 visitors this year, that its resources are locked up, or kept out of use. It is just that they are put to a different use than that to which they would be if commercial exploitation were permitted.

Few areas in the system at the time of the Service's establishment were important from the historical standpoint. The transfer of the War Department's battlefield areas and historical national monuments and the creation of a new group of national historical parks, however, have made history and prehistory a major concern of the Service, culminating in the passage, eleven years ago, of the National Historic Sites Act, under which ten sites have been established in Federal ownership and six under other ownership. On July 1, an eleventh will be added to the government-owned group, when the Massachusetts home of the two Presidents Adams and of other members of that distinguished family, will pass to the United States as a gift of the Adams Family Association.

Surveying the National Park System as it now stands and peering into the future briefly, it is apparent that, however much progress it may have been possible to make, there still remain some unsolved problems and uncompleted tasks. Of these, one of the most important, certainly, is the task of consolidating land ownership within the areas now comprising the system. The more than 600,000 acres of land which lie within their boundaries but which the United States does not own have always been a thorn in the flesh of the National Park Service. To acquire them would probably take as much as $20,000,000; yet, sooner or later—and if much later, the cost will be much more—they must be acquired. Only in that way can we assure the preservation of the valuable scenic, scientific and historic features to be found on many of these lands, and prevent their destruction or impairment. It is equally necessary as a means of simplifying administrative control; of permitting needed developments and preventing undesirable ones. A part of the same problem is that of restudying the boundaries of many of these areas to arrive at more logical lines, or to provide more satisfactory year-round habitat for valuable wildlife species, or to eliminate lands for which national park or monument status is not justified.

I am convinced that another of our major tasks is that of informing the American people more effectively concerning this great estate of theirs. There is a vast audience to be reached in the effort to accomplish this object; too often, I think, we spend time and effort unnecessarily on preaching to those who are already "converted." But every school child should know not only that there is such a thing as a National Park System, but he should know what it is, why it is, and why its character should be protected and upheld. It is equally important that his parents

have the same knowledge. I incline to the belief also, that an obligation rests on us—on the Federal Government, let us say—to take the parks to the millions who can get to none, or only a few, of them. One of the purposes for which they exist is to provide enjoyment to the public; they could do it, and probably should do it more effectively, if means could be provided, through various media—motion pictures, slides, photographs, publications, etc.—to reach an immensely larger audience than our present limited means permit.

What I have in mind is not at all for the purpose of building up higher and higher visitor totals. Increased use would undoubtedly result, but would be incidental to the enjoyment and inspiration and heightened love-of-country that would come with better acquaintance, however obtained, with the great things of these United States.

Problems of protection—particularly against attempts to undermine the basic concept of the system through commercial utilization of the forests, or the mineral resources, or the forage, or the flowing waters—we shall probably always have with us. We cannot expect to defeat these attempts if these problems remain the active concern of only a few, or if the principles we uphold are passively accepted by the great majority of the people of this country. It has been gratifying recently to realize how many there are who stand ready to spring to the defense of the parks, when such a threat arises as that directed at reduction of Olympic National Park, in order that its magnificent rain forest may be logged. All credit to the "man on the street" who takes such matters to heart, as well as to such courageous public servants as Governor Wallgren of Washington, and the members of the House and Senate who have announced their opposition to any such attempt. But there is need for many more such champions. We feel sure that there would be if we, and all those who value these treasures, could tell the story of their greatness simply and vividly to a far greater audience which simply wants to be informed.

Conservation gains, of whatever sort, have never been made without effort and struggle and heartbreak; it is equally true that they cannot be held effectively in any other manner. We in the National Park Service are strong in our faith that the American people require their national parks and monuments and historic areas to be defended so that they may minister alike to their physical and their spiritual needs.

Present Status and Future Outlook for the Nation's Forests

LYLE F. WATTS, Chief, United States Forest Service

ABUNDANT resources are the essence of national security and strength. This was one of the outstanding lessons of the war. It is just as true in time of peace. The measure of possible employment, of industrial expansion, of national progress will depend in large measure on the abundance of our basic resources.

In this period of great change and readjustment, it is important that we take a good, careful look at our present forest situation and the future outlook for the Nation's forests. The present forest situation, I must say frankly, is not a very happy one. But future possibilities are bright, if—and this is a mightily important "if"—we take adequate and aggressive steps now to put our forest lands to work.

The present acute shortage of lumber for housing is a highlight of our current forest situation. Problems of labor, equipment, cost and price may be part of the story in the lumber shortage, but back of all these is the plain fact that commercially mature timber has been exhausted to all intents and purposes in many areas and is getting increasingly scarce in others. In the west, lumbermen are having to reach farther and farther back toward remote last stands of old-growth timber, as the more readily accessible stands are exhausted; and in the east they are cutting back the second growth faster than it can be replaced. The total stand of saw timber in the United States declined nearly 40 percent in the 30 years between 1909 and 1938. During the war, the drain on the forests was substantial, and premature cutting of young timber was accelerated.

We have plenty of forest land. One-third of all the United States is forest land. It includes enough commercial forest acreage ultimately to meet any foreseeable demand for timber products, without sacrifice of large-scale opportunities for meeting expanding outdoor recreation needs or of other important services of the forests. But our forest lands can do all these things only with proper care and sound management.

On the National Forests, comprising nearly 180 million acres in 40 States, the U.S. Forest Service is endeavoring to build up the resources for a maximum sustained yield of products and services in the public interest. These resources include not only commercial timber but sources of streamflow and water supply, range forage for livestock, habitat for wildlife, recreation and vacation lands, and scenic values. They are being managed under multiple-use management plans which call for coordinated development of all these resources and their management for permanent production and use. Multiple-use management requires careful planning and coordination of the various uses of forest land. Where conflicts in use arise, adjustments must be determined in the

light of the greatest good to the greatest number of people in the long run. I believe such multiple-use management is an eminently sound approach to the problem of administering these large areas of publicly owned forest land, and the only means by which their fullest values can be realized in the public interest.

The National Forests are supplying about 10 percent of all the timber used for lumber in the United States. Timber sales in fiscal year 1945 returned more than $13,000,000, of which 25 percent was turned over to the counties containing national forest lands for county road and school funds. The National Forests also make an important contribution to the Nation's meat, wool, and leather supply by furnishing seasonal range for about 10 million head of cattle and sheep, including lambs and calves. Grazing fees returned an additional $2,158,000 to the U.S. Treasury in fiscal year 1945.

Still another big business on the National Forests is their use for outdoor recreation. In the last year before the war (1941) more than 18 million visits were made to the National Forests for recreation purposes, not counting some 28 million transient motorists and sight-seers. The National Forests harbor one-third of all the big game animals in the United States. They contain some 90 thousand miles of fishing streams and thousands of lakes.

During the past four years, those national forest activities not directly related to winning the war were sharply curtailed. Except for urgently needed access roads to commercial timber stands or strategic mineral deposits, all planned road and trail construction was suspended. Much maintenance work on existing roads and trails is needed to bring them up to satisfactory standard.

National forest recreation facilities, such as campgrounds, picnic tables, water systems, and sanitary facilities, were not well maintained during the war. Most of them were not maintained at all. We must not only rehabilitate the existing campgrounds and recreation facilities but also greatly expand these facilities to meet the very much larger recreation demand that is sure to come in the postwar years.

We want our National Forests to have as much wildlife as they can properly support. At the same time we must not permit wildlife populations to reach a point where they are destructive to the forest and liable to excessive death loss from starvation. We already have a number of over-populated deer and elk areas where the problem is no longer one of building up depleted populations but of bringing animal numbers back into balance with the natural food supply. Wildlife, like any other resource, requires management if it is to be kept in balance with its own food supply and with other uses of the forest.

About 80 million acres of rangelands within the National Forests are suitable for the grazing of domestic livestock, and livestock ranch properties in the West, representing investments of more than $300,000,000,

are dependent upon seasonal grazing on these national forest lands. Because the demand for grazing privileges far exceeds the carrying capacity of the ranges, the Forest Service is under constant pressure to let in more stock. At the same time it is up against pressure from those stockmen who do have permits to convert their grazing privileges into vested rights. And on top of all this we have a conservation job to do—to build up ranges that have been depleted by past overgrazing. Many national forest ranges never fully recovered from the heavy exploitation during World War I. If further depletion is to be prevented, it is absolutely necessary in many cases to reduce the number of stock permitted to graze. The usability of the ranges can be increased by additional fencing, improvement of water facilities, and especially by reseeding range areas which have been worn out by over-use. The Forest Service range management objective is to build up and maintain the national forest ranges at maximum carrying capacity and secure their full utilization on a sustained yield basis, in coordination with other forest uses, through fair and equitable distribution of grazing privileges.

National forest timber sales represent the principal economic support of many communities. In many cases they mean the difference between continued operation of a local industry or closing down, with disastrous effects on local employment and community welfare. Timber production from the National Forests can probably be doubled and maintained at that level without depletion of the resource. But if we are to have maximum timber production for the future we must reforest some 2 million acres of good forest land on the National Forests not now stocked with trees. We must improve existing stands, by thinning, pruning and other cultural measures, to get the quality and quantity of wood needed.

The Forest Service is convinced that public forest ownership should be substantially expanded. It is the only practicable way to assure stability and satisfactory management for a large acreage that is obviously not suited to or attractive to permanent private enterprise. Forest lands where the productivity is too low for private owners to be expected to hold them for permanent timber growing; lands which lie in such rough or inaccessible country that they have little attraction for private development; and lands that have been so exploited and denuded as to offer no prospect of further income for many decades—these are types of lands that would best be in public ownership. Many such lands are chronically tax delinquent. There are also certain areas where public ownership is needed to solve acute problems of watershed protection, or to protect the public interest in scenic or recreational values.

It has been roughly estimated that about two-thirds of the needed expansion of public forests should be in Federal Forests, the rest in State and community forests. High priority should be given to the acquisition of some 35 million acres of privately owned land within the bound-

aries of existing National Forests and purchase units. The present checkerboard pattern of public and private ownership in many of the National Forests seriously hampers effective administration and certainly does not make for proper development of the full potentialities of the Forests for public service.

The best forest land from the standpoint of commercial timber production is largely in private ownership, and under our democratic principles and traditions should properly remain so. It is to these lands that we must look for the bulk of our timber supplies. Many progressive private owners are treating their forest lands well; they deserve the fullest credit. But the great bulk of all timber cutting on private land falls below the standards we shall need to maintain if we are to grow the timber we should have for the future. Too much forest land is still being stripped of its timber and left incapable of further production for years to come. We cannot continue to eat into our forest capital and reduce the productive capacity of our forest land without serious consequences.

We must see to it, therefore, that our depleted forests are restored to productivity, and that private timberlands as well as public, are kept permanently in productive condition.

Every proper aid should be extended to the private owner to encourage good forest practices. One important aid will be an adequate program of research in forest management and in development of more efficient and less wasteful use of wood. Another is the early completion of the Nation-wide Forest Survey, begun before the war, which will provide basic information needed for intelligent planning of long-term forest conservation policies. We need also to expand the cooperative work of furnishing technical advice and demonstration on timber management and marketing to reach all of the 3¼ million farm woodland owners; and to extend similar aid to the 875,000 small non-farm forest landowners not now eligible for such service. Forest planting on denuded private land should be greatly accelerated; cooperative fire protection should be strengthened; and public aid should be provided for more effective protection against destructive forest insects and diseases.

Along with this work to encourage better private forest management, we shall need to take action to stop the use of destructive forest practices. The Forest Service has proposed public control of timber cutting and allied forest practices as the logical answer—some nationwide measure of regulation to make sure that cut-over lands will be left in reasonably productive condition. Such regulation may well be carried out by the individual States, but it should be developed under basic standards set up by National legislation, and with Federal aid in financing. And there should be provision for Federal administration in States which fail to take action. Public aids to encourage good practice and public regulation to prevent bad practice are both needed.

Right now is not too soon to begin building up our growing stock of timber. It will take many years to bridge the gap between cut and growth, to say nothing about developing full potential output of our forests. And it is absolutely certain that before the gap is bridged we shall have to get along for a spell with less lumber and other forest products.

We have made some noteworthy progress in forest conservation. But the biggest jobs lie ahead. We must increase our effort in a program of forest improvement and development that will make the forests play their full part in serving the welfare of the Nation and its people.

The Future of Wildlife in America

ALBERT M. DAY, Director, Fish and Wildlife Service, U. S. Department of Interior

AMERICAN wildlife is at the crossroads. In the years immediately ahead, the fish and game resources of this country are going to face the greatest army of hunters and fishermen in all history. The onslaught, in fact, has already begun. We felt the added pressure on waterfowl last fall when more duck stamps were sold than ever before. We're going to feel it a lot more next year. The push is on, and we might just as well brace ourselves to meet it.

It is easy enough to figure out WHY the numbers of gunners and anglers have suddenly increased. Millions of our boys have now learned skeet shooting. They have learned how to live in the out-of-doors. In a recent survey conducted by the *American Legion Magazine*, 70 percent of the servicemen said they wanted to hunt; 62 percent said they intended to go fishing. So do the homefolks. With the shorter work week, new cars, new tires, plenty of gasoline, and with the war jobs all done, there is going to be more vacationing. America is going to move out into the open. Sportsmen are going to be searching out every bit of wild country they can find.

The war gave fish and game a little rest in the seasons of 1942 and 1943. Hunting and fishing license sales fell off a little during each of those years. Restrictions on gas and tires, and the shortage of ammunition and fishing tackle helped hold the take to less than normal. But that situation changed before the war ended, much to everyone's surprise. During the fiscal year of 1944, which included the fall hunting season of 1943, the States sold slightly more than 7½ million hunting licenses. During the next year, or the fall of 1944, they sold almost 8,200,000 licenses, an actual increase during the last year of the war of 685,643 licenses. All available facts indicate that an even greater proportionate increase took place during the fall of 1945.

We have definite knowledge of the increase in duck hunters. The duck stamp sales tell this story quite accurately. During the fall season of 1943, 1,169,352 were sold. In 1944, the number jumped to 1,487,029,

an increase of about 27 percent. During the first six months of this fiscal year, which included the last hunting season, more stamps were sold than during all of the year before. In fact, on last March 31st, the duck stamp sales had reached the highest point in history, 1,686,368. It looks as though they might total 1,700,000 when all the sales reports are in. This matter of increased hunting pressure is not mere fiction. It is here now, and it is going to take the best kind of management possible to see that we do not cut into the breeding stocks of game.

The Fish and Wildlife Service has long predicted that there would be an increase in hunting pressure as soon as the war was won, but we didn't look for it to come before that time. After World War I, there was an immediate increase of 30 percent in the number of hunters, and that increase was never lost. This time, we predicted that the increase might be as much as 50 percent, and it looks now as though that prediction may come true.

We have resisted great pressure during the past two years for more relaxations in the hunting privileges. Bills have been introduced in Congress to permit the return of baiting and live decoys, and we have been deluged with petitions asking for various special relaxations for different parts of the country. Our philosophy has been to hold the line so we would not be faced with the necessity of tightening up just as the boys come back. But now it looks as though this very path may be the only one open for next year.

I think that even we proverbial pessimists in the Fish and Wildlife Service let ourselves become over enthusiastic as we saw the population of waterfowl climb from a low of less than 30 million in 1935 to around 140 million in 1943. The public began to take it for granted that this could keep on forever. We seem to have forgotten the significance of our experience less than 15 years ago—the dust-bowl days when the waterfowl hunting season had to be cut to 30 days and was almost closed completely. Right now, the Southwest is experiencing a severe drought, with dust storms similar to those which marked the beginning of that other disastrous period. The prairie States and the prairie Provinces of Canada have had two spring seasons now that were much drier than the preceding five lush breeding years. It is easy to forget that it was during the wet years from 1939–1943 that the birds really staged their recovery and that it was during these last two dry seasons that they have been dropping in numbers.

With increased hunting pressure upon us, it is time to recognize the cold, hard facts. We have overshot our annual increase during the past two hunting seasons, and during those two years the population of waterfowl has declined. Last year, the annual inventory showed a loss of some 20 million birds. This year's inventory, when the tabulation is completed, is very likely to show an additional decline.

What can we do about this decline before it becomes even more

serious? There is only one quick way of adjusting hunting pressure to supply—through the annual waterfowl hunting regulations. Back in the early 30's when the waterfowl population was on its way out, the regulations saved the day. The birds were well on their way upward at least two years before the marsh restoration programs of the United States and Canadian governments had time to take effect. Much as we hate to tighten up this year, just when servicemen are able to take to the field again, I fear that a shorter season or a reduced bag limit, or both, will be in order.

Past experience clearly shows, however, that law enforcement isn't enough. Marsh restoration and protection are highly important. Ducks and geese must have places to rest, eat, and nest. Some 100,000,000 acres of marsh have been drained in this country in the last 50 years largely in the flight and wintering range of the birds. The Fish and Wildlife Service has spent upwards of 20 million dollars in acquiring and restoring about 3½ million acres in the United States, much of it for breeding areas in the northern tier of States. The Canadian Government, through the Prairie Farms Rehabilitation Administration, has built over 5,500 dams, many of which are major reservoir areas. Counting dugouts, it has completed more than 20,000 water restoration projects. Ducks Unlimited, an organization of sportsmen, reports 155 marsh restoration projects. All of this work by all agencies is highly important. By wisely impounding, husbanding and managing the spring runoff and the permanent streams, man can look ahead and ease the shock when the next drought comes. That is when these projects will prove their real worth.

Regardless of the efforts of the United States and Canadian governments and of American sportsmen, however, the cold fact remains that the areas that can be so improved are only a fraction of the vast breeding range. We can influence but little the breeding conditions in those vast wilderness tundra and muskeg areas of northern Canada and of Alaska where the bulk of the waterfowl are raised. And so it is Nature that pretty well determines the success or failure of the duck and goose crop each year.

We can, however, do much to improve wintering conditions. Food and protection can be provided for the birds while they are spending their six months' stay in the South. Oil exploitation is pushing farther and farther into the southern coastal marshes. In some spots, the Federal Refuges are about all that are left to provide suitable winter feed. The whole development of the United States with its drainage, its agriculture and its human activity, has cut squarely across the wintering range of the birds. Only fragments of this once vast area can be salvaged and restored, but these are highly essential. The Service has been taking advantage of the river impoundment programs of the Army Engineers, Reclamation, and Tennessee Valley Authority to create new

refuges. Three of these have been put under administration this year. The great Mingo Swamp in Missouri is now being acquired with Duck Stamp funds and will be restored. Many others are needed.

Waterfowl are by no means the only wildlife that will be affected by changing conditions in the postwar years. Other game birds, and game animals both large and small, will feel the effects of the increase in the number of hunters. An additional problem that is giving concern to those interested in preserving our wildlife is the development programs—in great number and variety—that are now in various stages of planning by both Federal and State agencies. These include plans for super-highways, for scores of landing fields, for billions of dollars' worth of dams for irrigation, flood control, navigation, or hydro-electric power. All these will affect wildlife in some way.

Highway development will ultimately open up many of the areas that have served as reservoirs of game populations, particularly the big game species. Likewise, it is possible to visualize a time in the not distant future when a network of landing fields will cover this entire continent, providing quick and easy access at reasonable moderate costs to the more remote parts of the land. This will pose many problems for the managers of these renewable resources. I doubt that anyone has yet thought far enough in advance to visualize completely the effect of this type of development, nor the type of regulations and control that may be necessary if the wildlife populations are to be maintained.

The building of a dam directly affects the fish populations of the river. As a rule it reduces some populations; sometimes it may build others. Whether the end result is good or bad depends largely on the amount of careful planning that has been done in the initial stages of the project. For example, practical methods of salvaging runs of migratory fish, barred from their spawning grounds by dams, have been worked out in certain situations. Sometimes such salvage work simply is not feasible. Then it is necessary to weigh carefully the comparative values and to decide whether the fishery resources or the dam is of greater value to the community.

Dams also profoundly affect other types of wildlife. The impoundment of water often destroys the most valuable upland or waterfowl areas of a community. It might be assumed that water, regardless of its depth, is of value to waterfowl. It has some value as a resting place, but unless there are available nearby shallow areas with more or less stable levels during the growing season, which will produce the plant growth necessary for the protection and food of waterfowl, it will have only small value.

The Fish and Wildlife Service does not oppose all development of this type. But it does expect to exert its utmost efforts to influence the development programs so that they will do the least harm and the most good to the various forms of wildlife that may be affected by them.

I have dealt at some length with the disturbing situations that today are facing American wildlife, and all those interested in its preservation. But I do not wish to leave the impression that we view these problems without hope. In many respects, we are in a much better position to deal with them than we have ever been before.

First and, I am inclined to feel, most important of all, is the fact that the public as a whole is better informed and is taking a more active interest in wildlife problems. Even under the stress of war conditions—perhaps because of them—more and more people turned to the out-of-doors for mental rest and physical recreation. We know that they have a keener realization of what America's wildlife resources mean to them—their letters to Federal and local conservation agencies clearly show it. This is a healthy condition and a most encouraging one. Without public understanding and support, no program for wildlife preservation can be effective.

We are also beginning to benefit from the educational programs that were inaugurated by a number of schools and universities throughout the country, especially through the establishment of ten cooperative wildlife research units in 1935. In these centers, five hundred wildlife technicians have already been trained for effective service in state or Federal conservation agencies. While most of these men have been in military service during the war, they are now returning to civilian life—most of them to take up the work for which they were trained. This gives the country an increasingly effective staff of trained men working in the wildlife field. In addition to these technicians, many of the key men in the various conservation agencies of the Nation have been released from the army and navy and are resuming their former work.

These conservation forces—in which I count the informed public as well as special organizations and public agencies—have a big job to do in a somewhat confused postwar world if past gains are not to be lost and if further progress is to be made. By recognizing our problems clearly, by facing the difficulties without evasion, and by working together in a spirit of cooperation, I am confident that we can carry America's wildlife safely through this critical period.

A Balanced Water Program

LT. GEN. RAYMOND A. WHEELER, Chief of Engineers, Washington, D. C.

AN ADDRESS DELIVERED AT THE OKLAHOMA CITY PLANNING CLINIC, APRIL 19 AND 20, 1946. ARRANGED BY THE OKLAHOMA CITY CHAMBER OF COMMERCE WITH THE COOPERATION OF THE AMERICAN PLANNING AND CIVIC ASSOCIATION

I HAVE been looking forward to this visit to Oklahoma with keen anticipation ever since your distinguished governor called at my office some two months ago to extend one of the most cordial invitations it has been my pleasure to receive. It is probably no surprise to you that in extending the invitation, Governor Kerr injected a few thoughts about Oklahoma. He left me not the slightest doubt that if yours is not the best State in the Union, at least there is no better one.

But, as a matter of fact, I needed no urging to make this visit.

Oklahoma and I have something in common. We entered the government together. Oklahoma was admitted to statehood the same year I was admitted to West Point. There was, however, a considerable difference, as I recall it, in the general interest the two events attracted at the time.

Then again, I have always been fascinated by the early history of your territory—turbulent, rugged, determined and intrepid—as typically American as the covered wagon; or should I say "The Surrey with the Fringe on Top." And, like all other Americans, I have been amazed at the progress achieved during your comparatively short period of statehood—in progressive legislation—in the development of your fine schools and universities—and in the far-sighted planning of your social and economic programs.

To the Nation as a whole, Oklahoma means lush fields of grain, sleek cattle, rich deposits of coal and oil. It is synonymous with Food and Fuel. But the lexicon of the Army Engineers adds a third alliteration—Floods.

Great as your State has become, magnificent as has been its contribution to the Nation in peace and in war, it cannot attain its full economic stature until flood-menaced natural wealth is made secure; until waters are fully harnessed to the constructive service of navigation, irrigation, recreation, and the other beneficial water utilizations.

The control of stream flows is of the greatest importance in the full development of the natural resources of the area, and to the industrial expansion which should be yours in the years ahead. It is of immense importance to this city and to your plans for the future.

Here in Oklahoma, nature was lavish in her endowment of water resources, as well as the resources of the land. While your natural waterways are capable in general of meeting the needs of pioneer times,

and while their recurring floods caused little damage to a thinly scattered population, their value to the area and to the Nation has been more potential than real. Like all other natural resources, our waterways have to be developed by human ingenuity and effort—the very essence of that thought is contained in your state motto, which I admire greatly: "Labor Conquers All Things."

Just as your farms had to be cleared and cultivated, as your mines and oil fields had to be developed, to produce the bounty they afford, so must the rivers be brought under control and put to work to meet the growing needs of a progressive people. Here, as elsewhere in the Nation, the importance of such works has continued to increase with the concentration of wealth in river valleys, and with the addition of lines of communication and other improvements of modern civilization.

The Federal Constitution gave the Government the power to improve, maintain and control our rivers and harbors. The policies with respect to Federal improvements in the interest of navigation have been formulated through laws enacted by Congress over a great many years. More recently, flood control has been recognized as a Federal responsibility.

As you know, the improvement of the Nation's navigable waterways and their tributaries is a Corps of Engineers' function. To harness the Nation's streams, to use the waters to the maximum benefit of mankind, over and over again on their way to the sea, is a Corps of Engineers' goal.

In the performance of our civil functions, we are at once the engineering advisers to, and the executing agency for, the Congress.

Our water-use investigations are based on specific directives issued by the Congress, in response to request of the people where need has been recognized.

In striving for our goal, we think and act in terms of basin-wide development. While prosecuting work on individual projects to meet local needs, as rapidly as sound engineering principles and available funds permit, we make certain that project units are also integral parts of sound basin-wide plans and programs for maximum benefits.

There is under consideration at the present time a multiple-purpose plan for the improvement of the Arkansas River and its tributaries for navigation, flood control, the production of hydro-electric power and for other beneficial purposes. The report on this plan, covering the eastern portion of the Basin, was sent by the Secretary of War to the Bureau of the Budget the first of this month for transmission to Congress. A comprehensive investigation of the western portion of the Basin is being considered in another report now in preparation in the field.

The report which has gone forward this month provides for canalization of the Arkansas and Verdigris Rivers to secure a navigation channel with controlling depth of nine feet from the Mississippi River to Catoosa, Oklahoma, together with additional flood control works and the development of hydro-electric power. The costs of the improvements recom-

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mended is estimated at $522,678,000 for construction. Of this amount $76,560,000 is in projects already approved by Congress for flood control. In the preparation and submission of this report we have had the viewpoints of the local people through public hearings held in the field, we have had the viewpoints of other interested Federal Agencies, and of the five States affected, in comments from Departmental chiefs and from the Governors of the respective States, all of which go to Congress with the report itself. This is truly democratic process, bringing together in our reports many points of view and the best thinking of many agencies.

In the advancement of the program, as directed by Congress, we will continue to consult and cooperate with the several Federal agencies of the Department of the Interior, the Department of Agriculture, and the Federal Power Commission, and with the States and other local interests, to insure the fullest possible coordination.

Here at Oklahoma City, as in other cities of this area, our activities have a major effect on planning for the development of the city. A brief review of authorized and proposed projects in the area and a discussion of their effect on the city should be of interest. It also will illustrate the process by which we work, as I know of no better instance in this general vicinity of the development of a specific project than the recommended Oklahoma City flood-way plan.

Oklahoma City is, I believe, a good example of the interrelationship of a city with the streams of the area. The city is dependent on the North Canadian River for its water supply, which is a major factor in the life of the municipality. The river flows through the city, and when in flood, damages or destroys property, disrupts communications, and causes needless suffering to those persons living in the flooded area. The stream uncontrolled has an unpredictable effect upon the life of the city. It can be beneficial—or it can be harmful.

The North Canadian River is typical of the streams in the plains region. It flows through the most of its course between the Cimarron and the South Canadian Rivers. It rises in the high plateau region of northeastern New Mexico, and about two-thirds of its watershed lies in the western part of its basin. The watershed averages only about 10 miles in width near Oklahoma City.

As in other streams in this area, flows vary between wide limits, and are very small in dry periods, with high peak stages being reached when heavy rainfall occurs. Floods have caused serious losses along the river in the past, and the major part of these losses, other than those to crops, has been concentrated in Oklahoma City and its immediate vicinity.

Three projects have been authorized for construction by the Corps of Engineers in the North Canadian basin. These projects are primarily for flood control, and they include Optima in the Oklahoma Panhandle, Fort Supply on Wolf Creek near Woodward, and Canton near the town of that name, all of which are upstream from Oklahoma City. Of these

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projects, Fort Supply has been completed, and the contract for the completion of Canton was awarded recently, and construction started. Optima is in the process of study.

These three reservoirs will provide a high degree of flood protection for the entire main stem of the North Canadian River. The total available flood-control capacity of the reservoirs is sufficient to control the maximum flood of record, that of October 1923, at the Canton Dam Site. Because of tributary inflow from the uncontrolled drainage area below that point, the peak stage of the 1923 flood would still be above bankfull at Oklahoma City, although this peak stage would be reduced from about 130,000 c.f.s. to a little less than 20,000 c.f.s.

Subsequent to the authorization of these reservoir projects, a further survey report on flood control in the North Canadian River basin was authorized by the Congress. That report found a definite need existing for additional flood protection in the Oklahoma City reach. The flood plain of the river through the city contains about 5,200 acres of land, which is at present largely undeveloped because of floods or the threat of floods. This area offers attractive opportunities for industrial development; for recreational areas, such as parks and playgrounds, readily accessible to the residents of the city; for development of such facilities as airports adjacent to downtown Oklahoma City; and for sites for such transportation facilities as express highways.

The proposed leveed floodway would protect about 4,000 acres of urban property which would not be completely protected by the authorized system of reservoirs. The project would include the construction of about 13½ miles of levees having an average height of 7½ feet. The floodway would be designed to protect against a peak flow of 25,000 c.f.s., with 4 ft. freeboard, and would contain a peak flow of 45,000 c.f.s. without overtopping. Only minor modification of the existing channel would be involved, to include bank protection at bends in the channel to prevent excessive bank erosion and consequent damage to the proposed levee.

As I envision the application of civic planning in the flood plain area here in Oklahoma City, the construction of this floodway project, coordinated as it is with the authorized reservoir system now under construction above Oklahoma City, will afford a priceless opportunity for the full and complete development of the area, to allow its best use. For example: In one of our large midwest cities, where we have just broken ground for works to protect a potential industrial section now subject to annual flooding, the mayor reports that the city has received some 40 inquiries from industries interested in site location in the area to be protected.

At another location, a large manufacturing plant and a modern airfield operated throughout the war on land that a few years before was appraised at zero for tax purposes because river encroachments and floods

made it useless. The difference was created by bank and flood protection works, constructed by the Corps of Engineers as directed by Congress.

The stabilization of the stream flows made possible by the operation of the reservoirs should greatly increase the attractiveness and planning possibilities of your flood plain areas, outside of the limits of the floodway.

I sincerely hope that this very brief discussion of the program of the Corps of Engineers as it affects this immediate area has given you some information which will be of value to you in considering the integration of civic planning with our civil works.

To sum up, Oklahoma, like most of our States which lie between the Mississippi and the Rockies, needs the control and the full use of its streams for an expanding agriculture and for a potential industrial growth. It needs the unimpaired use of its rich bottomland areas. It needs soil conservation to retain the top soil, so essential to agriculture. It needs hydro-electric power to whatever extent that its development can be economically justified. It needs irrigation in the areas of inadequate rainfall. It needs low-cost waterborne transportation for bulky commodities and other adaptable freight, wherever navigation improvements can be justified. It needs dependable and adequate water supplies for the domestic and industrial uses of urban communities. It needs supplemental water supply for increasing low flows as an aid in the abatement of stream pollution. And it needs the best possible development of recreational advantages, and the preservation and propagation of fish and wild life.

The Corps of Engineers is committed to such a program for the Arkansas River watershed, a program which utilizes the knowledge and the experience of the other old and established Federal agencies who are the world's finest specialists in their respective fields, working in close cooperation among themselves and with the people.

"Labor conquers all things"—when we labor together.

Challenge to Planners

WILSON W. WYATT, National Housing Expediter and Administrator of the National Housing Agency

PLANNERS are faced with the challenge of a lifetime—a challenge to plan well and at the speed with which new housing will be built in the next two years.

From a planning standpoint, if there is one small ray of sunshine in the fact that the richest nation in the world doesn't have decent homes to offer its veterans, it is that this shocking shortage has brought about the widest interest in housing in America's history.

Veterans sleeping in parks, veterans separated from their families, and veterans living doubled up in miserable, cramped quarters have driven home the fact that housing as usual is a luxury that this Nation can no longer afford.

The bitter disappointment of the men who came back from the battlefields to find that their country had no room for them made people realize that housing had been limping along at horse-and-buggy speed while the rest of America was racing into the atomic age.

To help America catch up with its housing needs we have formulated a Veterans Emergency Housing Program which calls for getting 2,700,000 homes and apartments by the end of 1947. It is unfortunate that to date the quantity aspects of the program have caught the public's attention more than its provisions for quality. This is partly because we have been fighting to break the building materials bottleneck as step number one; with or without planning, you can't build houses without wood and brick and concrete and pipe.

Further, the building of 3 million houses is an explicit thing which anyone can visualize. The planning to see that these homes are built on good sites with good living facilities available to them is, unfortunately, not as likely to catch the imagination.

There is no use deluding ourselves; the need for city planning is not as widely understood as is the need for a roof over one's head. This, of course, makes our housing program more difficult to carry out. Planning must be a part of the emergency program, but many towns have not even made a start on this vital work. This means that the action programs we send out to municipal committees on such jobs as land assembly for the emergency program have to be written as though no planning has already been done.

We who are interested in planning will find that the value of planning will be judged by what comes out of the building under the emergency program, and from the decade of high-speed housing construction that will follow, for most developments will be described as "planned"

whether they actually are or not. In other words, if only lip service is paid to planning, the result will be bad housing and planners will be blamed, even though it is not their direct fault.

We must see to it that veterans' housing goes up on good sites laid out by experienced and skilled planners or all of the old mistakes will be repeated by irresponsible promoters masquerading as planners.

We must face the fact that, as of the present moment, too many people think of city planners as high-powered experts who come into town from New York or Chicago and draw a dream city of highly futuristic design (the Sunday supplement world of tomorrow's school of architecture), pocket their fee, and leave the city with a program it cannot afford and no idea of how to carry it out if it could afford it.

Others think of city planners as dreamers who collect statistics on how many homes have the garages in the rear and how many on the side of the house, how many left-handed people live on the right-hand side of the street, compile all of these in a report with more footnotes than text and return to their classrooms and libraries, leaving the city with a technical description of what it already knew.

You may think this is a mildly amusing exaggeration, but I assure you it is no joke that today the public as a whole does not understand the importance of city planning. Yet, the Veterans Emergency Housing Program makes sound planning for 2,700,000 houses a *must*—as necessary to the program as bricks and lumber. It calls for this planning to be done in a hurry under extremely difficult conditions. It will be no easy job.

And it is not the Federal government's job. The Federal housing agencies want good planning. They will offer every assistance to get it. The Federal government plans new steps to give more assurance that the houses built with veterans' priorities are worth their cost under present conditions. The rest will be up to the community.

Space does not permit going into the details of the Veterans Emergency Housing Program; however, some mention should be made of the common misunderstandings about what we are doing because they have done real harm, and I know you can do much to correct them.

For one thing, the order barring the construction on non-residential buildings that are not necessary or can be postponed until later, has been described as crippling the economy and preventing the construction of necessary schools, hospitals and community facilities.

This is not true. We know that in many communities new housing will require new schools, new hospitals, new stores, even new factories, for veterans need jobs to pay for new houses, and we want this necessary construction to go on. We do say that homes and hospitals are more important than new night clubs or bowling alleys, that an apartment to rent is more important to a veteran than a store that can be built just as well next year.

We are continually asked why more rental housing is not planned. We know many veterans want to rent, and as a first step, we have issued a channeling order requiring that 25 percent of all priorities be issued for rental housing. We know this is not enough and we will take every possible step to increase the proportion.

We have been accused of favoring prefabricated housing at the expense of conventional types of construction. This is not the case. The basis of the emergency program is conventional type construction. But this is not enough to meet the immediate demand. Prefabricated housing supplements conventional production and gives the purchaser his choice.

There is a further misconception about the type of prefabricated housing that will be built under the program. Too many people think of it as temporary, wartime style crackerboxes, unattractive and temporary. The prefabricated housing under the emergency program must meet rigid standards of livability, durability and safety.

Too many people only vaguely familiar with the housing problem do not realize that the Wagner-Ellender-Taft bill is essential, not only as a long-range plan but also as a basic tool for meeting the emergency during the next two years. They wonder why we need both programs and ask if the emergency program isn't enough by itself. They are not two programs. They are two pieces of legislation in one program.

The Wagner-Ellender-Taft bill offers a variety of valuable tools, all aimed at reducing the cost of housing. Certainly one of the main headaches in the emergency program is keeping costs within reach of the veteran. As planners are interested in all of the provisions of the Wagner-Ellender-Taft bill, not only because they all add up to lower housing costs and to a high annual volume of new house construction over a long period, but especially because of the conditions and aids which assure that this housing will be built in accordance with sound standards for land use and community growth.

This is reflected in the policy declared by the Congress that the welfare of the Nation and living standards of its people require a production of residential construction and related community development sufficient to remedy the serious cumulative housing shortage, to eliminate slums and blighted areas, and to realize as soon as feasible the goal of a decent home and a suitable living environment for every American family. Toward the achievement of this objective the Wagner-Ellender-Taft bill provides for appropriations of twenty-five million dollars over a five year period, to be available to local communities on a 50-50 matching basis for the making of studies of their housing needs and surveys and plans for housing and related community development, including, specifically, desirable patterns of land use and community growth.

Likewise, to carry out these desirable objectives, the Wagner-Ellender-Taft bill provides for a program of Federal aid to local communities for the assembly of land in slums and blighted areas and its clearance

and preparation for redevelopment, in accordance with whatever use the local community determines to be the most appropriate. The essence of this plan is that Federal and local aid will be combined to bring the cost of land acquisition, clearance, and preparation for redevelopment down to a point where its re-use in accord with sound planning principles will be feasible.

These provisions of the Wagner-Ellender-Taft bill offer our cities a golden opportunity—the chance to clear out the slums and blighted areas which cost so much in money and in human misery.

They give cities a chance to plan for the building that will follow the emergency program—to have new parks and airports and recreation areas or to return blighted land to good housing with space for light and air. They offer cities a chance to counteract the trend to the suburbs and to avoid some of the headaches caused by this outward migration.

Even with the Federal aids proposed through the Wagner-Ellender-Taft bill, the problem of land assembly for the Veterans Emergency Housing Program would be an extremely difficult one. Already prices of building lots and raw land have become inflated to the point where they seriously threaten our ability to keep housing within the reach of veterans, and there is no reason to feel that this situation will not get worse before it gets better.

But land assembly is the very heart of planning for veterans' emergency housing. Where will we get the land? Will it be fringe land? Will we continue the trend to the suburbs?

Basically, the answer lies in your communities. We can offer help and technical advice, but the final decision will be yours.

The answer to modernization of restrictive building codes lies in your community, too. Many of our zoning ordinances were enacted twenty years ago. They were based on little study of land-use patterns. We are proud of our better residential districts—usually limited to free-standing single family homes, with spacious requirements of lot size appropriate to pleasant homes costing ten or twenty thousand dollars.

There is no doubt that these are attractive neighborhoods, but are we realistic in the amount of space we have devoted to such homes? Are we facing the facts of life as shown in the actual distribution of incomes in the United States, especially among our returning soldiers?

War Department surveys show that most veterans cannot afford more than $6,000 for a house or $50 a month for rent. These figures present us with a challenge and a problem.

We like to think of our best residential sections as homes for the middle income group. Actually aren't many of them really for a very small percent of the population? None of us wants a glue factory in the midst of the town's nicest homes, but we should reconsider the amount of land set aside in A districts before we say, as planners, that it would lower our standards to permit veterans' homes in such neighborhoods

even if it means that sizeable groups of homes costing only moderate sums come into them.

Our zoning must face up to the facts of incomes of American families, to the new techniques that are going to provide houses of a new standard of soundness in patterns of lower cost, houses within the reach of many, including the REAL middle income group.

There *are* Federal controls in the emergency housing program. It could not succeed without them. If we were just to throw up "for grabs" the next two years' supply of building materials, none of us is so naive as to suppose that low-cost housing could outbid other prospective purchasers to get the share of materials it requires.

But Federal controls are kept at a minimum while Federal help to local governments is at a maximum. In the main, our program gives communities tools to get sound, standard housing according to sound plans. The fate of those of us who are leading this program nationally and the fate of the millions of veterans who need these homes are completely in the hands of the communities. Success or failure hangs on what they do.

If they jam their houses together on crowded gridiron streets without proper arrangements for light and air, if they fail to provide adequate health facilities, they are the ones who will be saddled with the slums these will inevitably become.

If they plan intelligently they will reap the benefits of having neighborhoods that will be good places to live for a lifetime and longer.

The emergency of new and imaginative designs in housing and the public's keen interest in these modern houses which a few years ago never got beyond an artist's drawing in the Sunday supplements dramatizes the fact that the days of building as usual are over. This means that planning as usual, which too often meant not planning at all, is gone forever.

Tomorrow's planning must move at a high rate of speed, it must be imaginative enough to cope with new designs and new methods, and there is one more must for Tomorrow's planning—it must start today.

We are not faced just with a two-year emergency building program that we can shrug off by saying, "It's too late to do anything now but wring our hands. When the two years is up we'll try to figure out some way to clean up the mess as best we can." No, today's crisis is just as much a planning emergency as it is a housing emergency.

The veterans' emergency housing program means two years of accelerated building that will set the pace for ten years of rapid home construction. If planners take hold of the emergency program and do a good job, we will have well-planned housing from now on out. If we fail to plan and plan well on the emergency program we will have a decade of housing chaos.

That is the challenge that faces us as planners. We will surely meet it.

Federal Buildings and Local City Plans

W. E. REYNOLDS, Commissioner of Public Buildings,
Public Buildings Administration, F.W.A., Washington, D. C.

THE Public Buildings Administration is keenly aware of its responsibilities to the communities of this Nation. It is our job to house the civilian activities of our Federal Government. The structures that house these activities must be located to serve the community and not just those people working in them. We must not forget the fundamental fact that these buildings, together with state and local buildings, are working aids of all the people.

We are often asked if we will join in the construction of a civic center. Certainly, if the plan of a city dictates its use for our purposes. We do want to know if the plan offers hopes of realization and is not a single-dimension paper plan. And we offer the suggestion that a civic center plan may be more than a simple grouping of buildings around a common axis. Topography may be such as to invite group spacing, the creation of main and secondary malls, and the development of beautiful vistas.

Proper city planning leads to order and godliness. And proper city planning is a plan to save and not to spend. It protects and enhances human values. It provides an atmosphere of decent living and thus develops a strong citizenry and a strong Nation. We want to help in reaching these objectives.

City planning is not new—the history of civilization emphasizes this fact. A city plan must be as dynamic as the changing times and the greatest force today, as in the past, is transportation. We are in an era of high-speed travel and decentralization. The impact of air travel has hardly reached us, but it will. Even now, we are considering roof landings on our post offices in the larger centers of population, for soon most of the mail will be carried by air.

As we examine cities and towns, what do we see? We see narrow streets —a relic of horse-drawn traffic. We see wider streets extending in rectangular pattern to the fringes—caused by the coming of the automobile. We see satellite communities, again on the rectangular plan (more lots, you know), without apparent relationship to other communities. What a tragedy, and what an estate to hand down to those that follow! Are we more interested in our ancestors than being good ancestors ourselves?

Fortunately, more and more people are becoming conscious of urban problems. Our cities must not go bankrupt, either physically or morally. With all the sun, fresh air and land available in America, the forgotten child must not continue long to use the streets as playgrounds and the gutters as park benches. Human life is too precious for that. But not to appear maudlin: How long can we continue to spend six dollars on twenty percent of the areas of our cities and receive only one dollar in return?

The Federal Works Agency is vitally interested in this entire problem. We in the Public Buildings Administration build and keep in repair substantially all Federal buildings in our cities and towns. We lease many buildings or parts thereof and maintain leased telephone and teletype service. We operate the buildings of the Executive Branch in Washington and many outside.

The Public Roads Administration is another unit of the Federal Works Agency. You know the splendid work it has done and is doing in the development of the Nation's highway system. Recent legislation permits it to extend aid in the construction of urban thoroughfares to provide fast vehicular traffic. This function is of the greatest importance to civic development.

And lastly, the newest member of our family is the Bureau of Community Facilities. Its most important present function is the loaning of money to permit timely and sane planning of public works. (See pages 61 and 100.)

When we plan to construct a building, its location is of first importance. We try to know a lot about a city before a site is selected. It is essential to know the past, present, and future trends of growth; the location of the centers of business and population and their general direction of movement; the character and type of employment; the future business outlook and many other factors. And we are especially interested in any proposed rapid transit and express highway systems.

In my own thinking of city development, I first turn to transportation. A good transportation system is as essential to the economics of city life as a trunk of a tree is to its branches or the arteries in the human system are to the body. Apart from health and sanitation it is one of the first things to be taken care of.

The haphazard horizontal expansion of urban areas has not been due to any single cause, but rather to a multiplicity of causes: improved transportation; improved septic tanks; more efficient private pumping equipment; the radio and other products of modern technology that have added to the convenience and comforts of living in the suburban fringe areas; and unwholesome conditions in the central areas of large cities that have constituted an overwhelming argument against the opportunities of health and happiness for families in the central city areas. To those who have given careful consideration to the problems of decentralization, the consequences of these shifts of urban populations and activity are grave and alarming. Enormous investments in central business districts are being jeopardized; tax revenue sources of the central cities are drying up, while municipal costs continue to mount higher and higher; unwholesome conditions in slum and blighted areas are not only growing worse but these areas are spreading; and of equal importance is the fact that due to lack of planning and control new blighted districts are being created in outlying areas.

As blight develops and spreads, the urban population moves on to the next pasture—the people are now virtually climbing over themselves in their attempt to live at the mythical edge of the city. Naturally, they cannot take with them sewers, waterworks, schools, libraries, fire and police stations, pavements, and the whole gamut of public works and facilities, not to mention homes and other private buildings. These are all left behind and have to be duplicated, at enormous expense, in the outlying areas.

Local officials are beginning to realize that there is a tremendous waste involved in the provision of pavements, walks, and all sorts of municipal utilities in front of and in rear of vacant lots; but this waste, though great, is small in comparison with the corresponding costs of providing municipal facilities and services in the far-flung fringe of cities. Unless something is done about it soon, the wastes due to lack of planning and control of urban areas will bankrupt local governments and the majority of urban people as well. The remedies for the present ills of urban areas may cost a lot of money, but remedies must be found, applied, and paid for in order to avoid social as well as economic bankruptcy of urban communities.

We hear much abuse of the rectangular systems of streets. I have joined in heaping abuse; but in most cities we face a fact rather than a theory. Time studies, and simple observation, point to the fallacy of mere widening of streets to effect a major cure of our traffic ills. Very often the wide streets develop into additional parking areas and often double parking. An express highway with grade crossings eliminated will carry the traffic of many of our so-called through streets, and with minimum danger to both drivers and pedestrians.

The ideal system, of course, is the gradual development of neighborhood areas, each having its own shopping, school and recreation areas with fast traffic linked to the peripheries. The local streets, perhaps now rectangular in plan, become strictly local streets and lend themselves to various treatments, including eventual closing. We have the paradox of congested traffic and too many streets, due to improper design. A waterworks system would be a failure with an over-abundance of laterals and no trunk lines.

Being in the building business, we are interested in the design of the local public buildings. Architecture in America is in a most unsettled state. The profession is groping for simple and new forms of expression. In many cases dignity has been lost, which may be part of the cost of progress. The movement is now turning to saner principles of design. A building is not necessarily functional because it looks like a badly designed barn. Each city should have a Fine Arts Commission similar to the one for Washington, D. C. It is a protection against unwise expenditure of public funds.

It is our purpose to conform to the architectural traditions of any

city in which we build. We plan on using local architects as much as possible and local materials wherever adaptable. We propose to construct buildings that will operate at maximum efficiency and minimum cost. We have done extensive research in the building field, using as background material our experience in operating many millions of feet of space and the continuous repair of several thousand buildings. These studies will be made available to the private architect so that, jointly, we may produce an acceptable structure.

It will be some time before we undertake a major building program. Materials and men are needed in the construction of homes, hospitals, schools and other civilian structures. The program of the Government should be so timed as to take up any slack in employment and not be a competitor with the private citizen.

Stabilization of the construction industry is essential. It, together with a prosperous agriculture, can offer a strong balance to our economy. The construction industry is a relatively uncontrollable giant let loose in our economic atmosphere with enormous impact on our national income. Any industry that possesses extreme seasonal changes in volume and variations of over 300 percent in cycles of years is a major disturbing element in employment. The problem is to level off the hills and valleys of the volume curve. We can help by restraint in Government building at this time.

In closing I want to pay tribute to two citizens of Texas who have helped shape the destinies of our National Government for many years. They have both expressed a wish to retire from active participation in the Congress. The Honorable Judge Hatton Sumners, Chairman of the House Judiciary Committee, is from Dallas. He has been a powerful influence in the House and I will miss him as a friend with whom I have many official contacts. The Honorable Fritz Lanham, Chairman of the Public Buildings and Grounds Committee of the House, has long been a most personal friend. Our legislation emanates from his Committee. He is beloved and respected. I am not quite sure how we will get along without him. These two men are a credit to the State and Nation.

The Federal Government and Advance Plan Preparation of State and Local Public Works

GEORGE H. FIELD, Commissioner, Bureau of Community Facilities, F.W.A., Washington, D. C.

I SPEAK primarily on Federal assistance in the advance plan preparation of State and local public works, as a means of encouraging the creation of a reservoir of fully planned public works. And, in addition, I shall speak about the problem of providing community facilities that are vitally needed at the present time in connection with an expanded housing program.

President Truman, in his recent message transmitting the budget for the fiscal year 1947 to Congress, reaffirmed the need for advance planning to build a reservoir of public works for later construction.

"Our public works program," he declared, "should be timed to reach its peak after demand for private construction has begun to taper off. Meanwhile, however, plans should be prepared if we are to act promptly when the present extraordinary private demand begins to run out." In this same message, the President emphasized the fact that state and local governments "have an essential role to play in a national public works program." And he referred to the program of Federal advances to state and local governments for planning public works, stating his belief "that further appropriations will be needed for the same purpose for the fiscal year 1947."

The concept of a reservoir of state and local public works, planned in advance and ready for construction whenever required, was much discussed during the war by those who were interested in postwar economic developments. It was recognized that such a reservoir of fully planned public works, the construction dates of which could be postponed or advanced as desired, would be of great value in stabilizing the construction industry and in helping to maintain a high level of employment in that important segment of our peacetime economy.

It was known, however, that there was a general inadequacy of advance plan preparation of state and local public works for postwar construction. This was to a large extent due to a general lack of funds available for planning purposes in advance of the issuance of bonds to provide for construction. It was widely recognized that an adequate reservoir of fully planned state and local public works could not be built up without Federal assistance to state and local planning activities.

In view of this situation, Congress in the fall of 1944 authorized a program of Federal planning advances, or loans without interest, to state and local governments, to be administered by the Federal Works Agency. This authorization is contained in Title V of the War Mobilization and Reconversion Act of 1944, approved October 3, 1944. An appropriation of $17,500,000 was made for this purpose in May 1945, and a second

appropriation of $12,500,000 late in December, 1945, making a total of $30,000,000 for the fiscal year 1946. This program is administered by the Bureau of Community Facilities, Federal Works Agency.

Planning advances may be applied for by any non-Federal public agency which is authorized to construct public works. Housing projects are not eligible for planning advances under this program; nor are advances made for the planning of highway and road projects for which planning funds are already available under the Federal-aid highway program. All other non-Federal public works that the applicant expects to construct within four years are eligible for planning advances. These include: highways, roads and streets (except those for which Federal-aid highway funds are available); bridges, viaducts and grade separations; airports; sewer, water and sanitation facilities; schools and other education facilities; hospitals and health facilities; other public buildings; parks and recreational facilities; and miscellaneous public facilities.

Each planning advance is a sum advanced to make possible the plan preparation of a specific public work. Applications for planning advances are submitted to the division offices of the Bureau of Community Facilities. The division engineers examine all applications and send them to the central office in Washington, D. C., with recommendations for approval or disapproval. The central office takes final action on applications.

After the approval of an application for a planning advance, an agreement is executed between the applicant and the Bureau. The applicant agrees to complete the plan preparation and to repay the advance when the construction of the public work so planned is undertaken. An initial payment of half of the approved advance is then made to the app icant; and final payment is made when the plan preparation has been completed and the final planning costs have been determined.

It is interesting to note that the public works for which advances have been approved are largely of the types essential to the expansion of housing and industrial construction. The sewer, water and sanitation facilities, schools and other educational facilities, and hospitals, account for 71 percent of all the public works for which planning advances had been approved through March 31, 1946.

Planning advances had been approved by the Bureau through March 31, 1946, in the total amount of $24,195,000, which will make possible the planning of state and local public works having an estimated cost of $1,029,692,000.

Applications for planning advances are continuing to be received by the Bureau in large volume. Applications were under review as of March 31 of this year for planning advances totaling $31,208,000, for public works with an estimated cost of $1,148,369,000.

In the meantime, how much planning of public works is being carried on by state and local governments without Federal assistance? In order to find this out, the Bureau instituted a continuing survey in October,

1945, with respect to plans in the completed and in the design stages of preparation. The design stage is that in which final drawings and specifications and contract documents are being prepared and all necessary steps are being taken to place the public works in the completed stage of plan preparation. Full data on these plan preparations, through December, 1945, may be found in a report issued recently by the Bureau of Community Facilities and entitled "Report on Plan Preparation of State and Local Public Works." As reported by state and local governments, plans have been completed for public works having an estimated cost of $961,144,000; and plans are in the design stage for public works having an estimated cost of $4,404,316,000.

Nearly one-half of the completed planning, in terms of construction cost, which has been carried on without Federal assistance, is reported from the State of New York, including the cities, counties, and all other units of government. And New York City alone is responsible for 40 percent of all the completed plan preparation reported by governmental units throughout the country.

Moreover, a great many governmental units reported having no plans in either the completed or the design stage. These include 1,292 counties, 2,346 cities of 10,000 or less population, 20 cities of between 50,000 and 100,000 population, and 12 cities of over 100,000 population.

Although a substantial volume of plan preparations in the design stage is reported, this also is very largely concentrated in a few States. Information gathered by the field staff of the Bureau indicates that many of these plan preparations are not far advanced in the design stage, and that many of them may not be completed without Federal assistance.

The sparsity of plan preparations over a good deal of the country substantiates the view that Federal assistance to state and local planning should be provided to a greater extent than has so far been possible with the funds made available for this purpose. On the whole, it is the smaller units of government, those in the lower population range, which are most in need of such assistance. In short, there does not exist at the present time anything like an adequate reservoir of fully planned state and local public works.

It is at this time especially important that the planning of state and local public works be carried on well in advance of the time when the need for their construction will arise. The creation and maintenance of a reservoir of state and local public works will facilitate the carrying on of a large public works program when materials and labor are fully available and when the construction industry requires such projects to maintain a high level of employment.

Because of the urgent need for veterans' housing, the Civilian Production Administration recently issued an order restricting construction in order to give first priority to housing for veterans. This order *does not* require public bodies to secure an authorization to construct highways,

roads, streets, sidewalks, bridges, tunnels, subways, pipe lines, utility facilities, sewer and water projects, dams, canals or drainage or irrigation ditches. It *does* require public bodies to secure authorization for the construction of buildings, such as schools, hospitals and municipal buildings. Public buildings that are deemed essential, and that cannot be deferred, will receive authorization for construction from Civilian Production Administration; but they will not receive priorities on materials. It is hoped that supplies of materials will be sufficient to cover authorized public construction, but conditions will vary greatly from community to community. It is clear that we cannot have an expanded housing program without an expansion of essential community facilities, including streets, sidewalks, and sewer and water facilities at an early stage and schools and hospitals in due course.

The provision of facilities, such as water and sewer facilities, and educational and hospital facilities, in connection with veterans' housing, is going to be an important and serious obligation. I have already pointed out the large extent to which the program of planning advances of the Bureau of Community Facilities is concentrated on public facilities of the types that are essential to the provision of homes.

Many communities will be called upon to cooperate with real estate firms, private builders, and the National Housing Agency, in preparing sites for veterans' housing. While it may be desirable from many standpoints to construct individual houses for veterans, it may not always be feasible to do so. If we are in earnest about providing homes as quickly as possible for millions of our returning veterans and their families, we will also have to construct multiple-unit dwellings and apartment houses. This compact type of housing will, in my judgment, bulk large in our housing program if the fullest practicable results are to be achieved.

Such compact housing has a better choice of building sites, by and large, and presents fewer problems in the provision of utilities. In many of our cities and towns there are building lots available that are too costly to use as sites for one-family houses but are financially practicable as sites for multiple-unit dwellings or apartment buildings. And the necessary community facilities already exist in such neighborhoods—though they will no doubt in many instances have to be considerably expanded to keep up with expanding needs.

But here again the available sites within our cities are limited, and outlying sites will have to be found for a good deal of housing. The problem of providing community facilities for both multiple-unit dwellings and single-family houses will have to be solved expeditiously if we are to have a sound expansion of our communities.

The thousands of cities, towns, and counties in the country have a tremendous responsibility in the overall planning of their communities and the general need for steady development should not be ignored in our rush to construct new dwelling units. The problem involved is not a

new one. Many of our cities have suffered financially as a result of the flight of population from their centers to their suburban fringes, leaving parts of their central area to decay into slums. The urban communities must find a way of making it attractive for the real estate firms and building contractors to construct new dwelling units within cities where community facilities can be made available at relatively small expense.

The housing emergency has created a situation in which immediate and urgent needs are to some extent in conflict with overall plans for civic development. To city planners this is an old story. There seems to be eternal conflict in the civic arena between the needs of today and long-range plans which take account of the needs of the future. But these situations arise very largely out of the fact that overall city planning is stil comparatively new, often lacking in funds and authority, and too often, in many places, an aspiration and a hope rather than an administrative reality. Ideal city planning would no doubt have foreseen this present emergency and have prepared for it in advance. But if we could look that far ahead and plan that well, then there would be no real emergencies. We are far from that ideal state of affairs; therefore, we must do the best we can to meet our emergencies as they arise. We have still to learn how to coordinate our efforts for the solution of our peacetime problems as we did for the winning of the war. In this particular field of housing, the long-range view is not one that should be impatiently put aside. The needs of tomorrow have to be considered. The needs of the years ahead are matters of sober practical interest to all city dwellers and all city officials. An effort should be made in this emergency not to create new difficulties for tomorrow and not to lay unnecessary burdens upon ourselves in the years that will follow. But here, as always, compromise is necessary between long-range planning and the urgent emergency needs of the times.

In the administration of our advance planning program, we require that before an advance is made to plan a specific public work, we must receive assurance from the state, city or local planning authority that the public work conforms to the overall plan of the community. But when there is no such planning authority, we accept projects approved by local officials who are in charge of public works of those particular types.

The Civilian Production Administration in the administration of its new order restricting the use of building materials has given the local communities an opportunity of controlling the expansion of new construction during the next few years. The emphasis in the construction industry must necessarily at first be on the expansion of private construction, such as homes, commercial buildings and industrial plants. But it is important that sound planning of the public works which go hand in hand with private construction should be taken care of in the meantime. Then, when a more abundant supply of construction materials and labor is available, the public works that are so necessary to our

communities will be provided within the framework of sound, well-thought-out overall community planning.

While it will be necessary to hold back on the construction of needed public works, this is the time to move forward at a rapid pace in preparing the drawings and specifications and arranging for the financing of the ultimate construction of the needed public works that have been deferred during the past five years.

The table attached to copies of my address gives additional information concerning our advance planning program.

TABLE I

Plans Aided by the Federal Government under Title V of WMRA—1944
Amounts Apportioned, Advances for Plan Preparation Requested and Advances Approved by State as of March 31, 1946

	Amounts Apportioned	Advances Requested		Advances Approved	
		Number of Applications	Amount	Number of Applications	Amount
United States	$29,066,169	5,727	$55,402,639	3,362	$24,194,585
Alabama	553,656	156	1,062,654	80	552,608
Arizona	160,500	76	309,140	40	159,699
Arkansas	380,803	119	561,492	85	333,951
California	1,589,309	369	3,646,200	256	1,549,596
Colorado	219,472	21	331,504	15	173,852
Connecticut	333,922	39	455,057	31	306,767
Delaware	145,500	3	17,247	2	9,160
Florida	565,850	154	3,058,368	55	494,286
Georgia	780,489	311	1,975,186	123	759,549
Idaho	145,500	23	148,400	21	129,000
Illinois	1,638,115	496	6,480,819	244	1,600,269
Indiana	714,679	141	2,327,166	66	709,306
Iowa	496,039	58	233,963	40	159,318
Kansas	351,994	75	393,211	58	315,251
Kentucky	581,013	105	765,625	65	555,994
Louisiana	611,992	169	907,593	139	563,755
Maine	165,521	39	258,512	17	83,487
Maryland	455,922	49	803,871	38	343,868
Massachusetts	843,580	130	1,328,548	87	596,015
Michigan	1,086,910	231	2,249,452	108	1,025,493
Minnesota	545,537	94	558,158	57	260,014
Mississippi	426,635	113	455,799	82	323,605
Missouri	889,606	247	1,714,097	161	859,985
Montana	160,500	33	222,750	25	160,500
Nebraska	257,186	24	201,418	13	92,446
Nevada	155,500	38	382,162	24	154,662
New Hampshire	145,500	25	202,063	14	84,955
New Jersey	912,938	278	3,949,281	109	856,386

	Amounts Apportioned	Advances Requested		Advances Approved	
		Number of Applications	Amount	Number of Applications	Amount
New Mexico	145,500	44	191,700	30	120,492
New York	2,633,666	34	1,846,936	30	1,420,566
North Carolina	697,963	95	524,910	80	479,148
North Dakota	145,500	21	86,950	14	68,975
Ohio	1,489,832	276	3,403,778	154	1,447,850
Oklahoma	606,492	139	1,155,220	95	606,492
Oregon	212,925	36	262,216	28	212,495
Pennsylvania	1,934,393	228	2,191,508	164	1,743,887
Rhode Island	145,500	16	323,644	6	84,387
South Carolina	411,112	284	1,740,269	107	390,829
South Dakota	145,500	20	51,800	10	25,900
Tennessee	569,633	89	1,234,934	30	457,888
Texas	1,253,453	327	2,167,569	236	1,185,461
Utah	170,500	85	526,393	41	168,250
Vermont	145,500	19	140,552	14	89,648
Virginia	623,277	77	1,542,949	46	596,530
Washington	409,161	77	941,129	46	399,149
West Virginia	396,636	77	537,544	56	394,790
Wisconsin	638,108	94	695,382	69	611,861
Wyoming	145,500	13	57,835	13	57,835
Dist. of Columbia	175,500	7	310,500	6	175,500
Alaska	145,500	26	279,730	18	145,275
Hawaii	145,500	15	143,600	14	97,600
Puerto Rico	365,350	12	45,855		

Report of Discussion

JULIAN TARRANT, Head City Planner, Detroit, Mich., *Leader*
ELLA PARR JAMES, Denver, Colorado, *Reporter*

THE session of Tuesday morning, April 23rd, was devoted to a discussion of assistance that may be expected from Federal agencies, and evoked lively interest. Major General U. S. Grant 3rd presided. The subject was: "The Federal Government Serves Local Communities."

Joseph P. Tufts, Regional Expediter for Housing, NHA Dallas, spoke on "Federal Service for Housing." Mr. Tufts pointed out that three and one-half million veterans need housing. To meet this need 1,200,000 units should be built in 1946. To meet this emergency mayors are being asked to set up housing committees for a two-year tenure, composed of committees from Real Estate Boards, Chambers of Commerce, Planning Commissions, Zoning, Labor and civic groups. Prefabricated houses will be permanent. We should develop new ideas in construction and refrain from lowering housing standards. But an effort must be made to keep the cost below $6,000 per house, and to increase the number of rental houses. Expediter Wilson W. Wyatt ordered that one-fourth of all veterans' houses be for rent. Of the remainder built for sale, half must be below a dividing line which varies for each community. Housing is being forced to the suburbs because of the high cost of city land. This means added cost in extending public utilities and transportation. Hence the need of official regional planning.

Congress has established a special fund to erect 200,000 temporary houses, as well as housing for universities and colleges. Local Planning Commissions should select the land and determine land use, and local committees must work out this problem immediately if progress is to be made. Quoting Mr. Tufts: "If we have the wits and wisdom to get over the next few years in this emergency we will come out with some progress in regional planning."

The program of the Bureau of Community Facilities was presented by Commissioner George H. Field, who stressed the necessity of creating a reservoir of public works, timed to reach its peak after the demand for private construction has tapered off, so that the construction industry may be stabilized and a high level of employment maintained.

To meet this situation, Congress has appropriated $30,000,000 to be used as advance loans without interest to make possible the drafting of plans by state and local governments. Of this $24,000,000 has been allotted. In addition, a Bureau of Community Facilities survey has shown that state and local governments have planned public works without Federal assistance having an estimated cost of $961,144,000; while other plans are in the design stage, having an estimated total cost of $4,404,316,000. The type of plans receiving Federal loans, as determined by the Bureau, are for expansion of housing, and industrial expansion; sewer, water, sanitation, educational institutions, hospitals.

However, the planning is spotty and confined to a comparatively few States. There is not nearly an adequate reservoir of public works plans, and the Bureau believes Federal assistance toward creation of such plans should be expanded. Restrictions upon building materials for buildings other than veterans' housing have been established by the CPA but these do not apply to utility facilities, without which no housing can be constructed. The Bureau favors multiple-unit dwellings, or apartment houses.

Overall planning is vital. The trend toward development of housing on suburban fringes is turning many central areas into slums, and urban communities must find a way of making it attractive for real estate firms and contractors to construct new and attractive units within the cities. Such a dual development points to the necessity for long-range planning.

The Bureau will work with planning authorities by requiring that new public works shall conform to the overall plan of the community before making advances. While it now is necessary to hold back on construction of public works, this is the time to move rapidly in preparing plans for these works so that no lapse of time shall occur when they are needed to maintain stability.

Commissioner of Public Buildings, W. E. Reynolds, discussed the relationship between Federal buildings and local city plans. He answered in the affirmative the question often asked as to whether the Public Buildings Administration will join in the construction of civic centers. This he qualified with the observation that the centers must be suited to the Federal purposes and offer hope of realization. He urged more attention to transportation, which should be as dynamic as our times. Even now the Federal Buildings Administration is considering airplane roof-landings on post offices. In this connection, recent legislation permits the Public Roads administration to aid in the construction of urban thorofares. In locating new Federal buildings the administration is especially interested in proposed express highway and rapid transit plans.

Remedies must be found to counteract decentralization and blight, as the first spreads the latter, with consequent loss of existing service utilities, public works and educational institutions, as well as "left-behind" housing. Unless a cure is found municipalities will be bankrupted.

Express highways, neighborhood areas complete in themselves, building design are steps in this direction. Mr. Reynolds also urged delay in public works and building construction with the purpose of stabilizing the construction industry.

Following these addresses, Julian Tarrant, Head City Planner, of the Detroit City Plan Commission, led the discussion. Questions related largely to the extent of control to be exercised by Federal agencies and the proportion of Federal aid. The replies stressed the points that the Federal government will rely largely upon the local committees, and

insist first that projects receiving Federal aid must fit with local plans. The creation of master plans is an urgent necessity so that haphazard construction may be avoided.

Revision of building codes also is needed. These need not be completely rewritten, but should be so amended in order that more uniform practices may be followed throughout the country in building construction. There will be no tendency on the part of the Federal Government to dictate how projects shall be financed—whether from the general funds or bond issues—but the community will be asked how it will raise the money.

No Federal funds will be loaned for airport plans until the demand for private construction has lessened.

The Federal City

U. S. GRANT, 3rd, Chairman, National Capital Park and Planning Commission

THE impact of the war and its end, with the problems of reconversion and housing for a greatly increased population probably has been as intense upon the National Capital as upon any city in the United States. The Federal City, reasonably well equipped for a population of about 600,000, has found itself facing a real emergency, with a population estimated at 938,000. The decrease in population on cessation of hostilities, anticipated from the experience of the past, has not come about to the extent and with the rapidity expected.

The urgent need for planning control in order to fit new construction projects into the desirable development of the city and its suburbs, and to adjust conflicting demands and interests among themselves for the best interests of the community as a whole, is evidenced by the fact that 25 executive agencies have planned between three and four hundred million dollars worth of projects, private enterprise has estimated, according to the report of the Board of Trade Post-War Planning Committee, about $140,000,000 worth of major remodeling and new building construction projects, and in addition, approximately 50,000 new dwelling units need to be built within the next few years. The need for an up-to-date revision and publication of the comprehensive plan for the National Capital and its environs was foreseen in January 1945 by President Roosevelt, but the funds to carry out his wishes have not been obtainable so far. The National Capital Park and Planning Commission has therefore had to carry on its efforts at coordination by individual conferences with different constructing agencies as the occasion arose.

The appropriation of funds for the purchase of land for park and recreational purposes has, however, been resumed and the available funds are being expended for the purchase of urgently needed playgrounds in the old central parts of the city, where recreation facilities have not been adequately provided heretofore, for completion of projects in which the Government already has a considerable investment, and for the purchase of unimproved land which is now threatened with the probability of buildings because of the special need therefor.

Construction plans are in the course of being prepared for two sections of the circumferential Fort Drive, about 98 percent of the right-of-way for which has already been acquired. This Drive will not only surround the city with a very attractive road about 33 miles long, studded with local parks containing the sites of the original Civil War forts, but it will also have a great traffic value in giving direct intercommunication between various arterial streets, thereby avoiding the entrance to the more congested parts of the city of a considerable volume of traffic.

During the year substantial progress has been made in the revision and perfection of the Metropolitan Area Thoroughfare Plan. In order

to secure proper correlation of the thoroughfares involved, both as to timing and location, a voluntary committee consisting of representatives of the Planning Commissions of the States of Maryland and Virginia, the Highway Department of the District of Columbia, the Public Roads Administration, and the National Capital Park and Planning Commission, has been established and working.

In anticipation of the passage of the Federal Airport Act, providing for Federal aid for the development, construction, improvement and repair of public airports in the United States, investigation of the needs of the Metropolitan Area and of the possible airport sites was initiated by another similar Committee containing representatives of the planning and aviation authorities of the local political divisions involved. The study has progressed far enough to indicate that the needed sites are available, but not to give any indication as to the likelihood of adequate local contributions and funds or the readiness of the suburban areas to participate in a program of acquisition in the near future.

With the special authorization of Congress, the U. S. District Engineer has undertaken a comprehensive study of waterfront development, which with the Planning Commission's cooperation promises to develop a coordinated and consistent plan for the best utilization of the waterfront available in the entire Metropolitan Area. Public hearings and considerable negotiation will manifestly be necessary before the required results can be obtained.

Much progress has been made in the acquisition of land for the George Washington Memorial Parkway on the Maryland shore between Cabin John and Great Falls. Legislation is being drafted to authorize the construction of the road with Federal funds. In anticipation of considerable public demand, the National Capital Parks have taken steps to make the Great Falls more accessible to public use than heretofore. The project for multi-purpose dams in the Potomac, which would have drowned out about six miles of the Chesapeake and Ohio Canal and much of the inestimable park values between Washington and the Great Falls of the Potomac, was disapproved by the Board of Engineers for Rivers and Harbors in view of the serious objections raised at a public hearing held last summer.

For the first time in twenty years the National Capital Park and Planning Commission has had to make formal objection to legislation in Congress proposed by the District Commissioners which would authorize them to replace the existing 4-lane bridge across the Potomac at 14th Street with two 4-lane bridges. While there is universal agreement that the present bridge must be rebuilt, the Planning Commission and others have objected to placing at this point twin bridges of such great capacity that the street system in the District of Columbia could not absorb and distribute the traffic the bridges could deliver. The American Planning and Civic Association, the Planning Commission,

and the National Capital Parks have appeared in opposition to this legislation because the project is inconsistent with the best interests of the city from the traffic standpoint, because it will do great damage to the surroundings of the Jefferson Memorial and West Potomac Park, and because it will increase the damage to the Potomac Park system from high floods when they occur. The better solution from the planning standpoint appears to be the construction of a single 6-lane bridge at this point, and the later construction of a bridge just north of Alexandria to relieve traffic at 14th Street by taking the through north and south coastal traffic and giving access, over a new bridge that is being constructed at South Capitol Street across the Anacostia River, to the eastern and northeastern part of the city without such traffic having to come into the congested central area.

A report on transportation and the relief thereof in the central congested area of the city was prepared for the District Commissioners by the J. E. Greiner Co. and De Leuw, Cather & Co., consulting engineers. This report recommended considerable underground construction for taking street car tracks on certain major lines off the street surface and running them through tunnels. Considerable objections are seen to the recommendations and the latter are in course of being carefully studied by a special committee appointed by the District Commissioners.

Legislation passed defining the boundary between the District of Columbia and Virginia, the actual location of which has been a matter of dispute for many years and the cause of many cases of delay in the execution of justice because of the doubts raised as to jurisdiction of different Courts. The State of Virginia also passed collateral necessary legislation, so that this question may now be considered settled.

The District of Columbia Motor Vehicle Parking Agency, established by law in 1942 and for which no funds were appropriated during the war period, was revived and is now operating effectively. Legislation establishing the policy of the Federal Government in regard to the provision of parking facilities for its officials and employees has passed both Houses in slightly different forms and is now in conference. The prospect of such a Federal policy being established has already been very helpful in securing the interest of private enterprise in the creation of additional parking facilities in the central area for the public at large.

A compromise Urban Redevelopment bill (S. 1426) for the District of Columbia was adopted last autumn by the Senate Committee on the District of Columbia after extended hearings on two other bills that had been previously introduced. This compromise measure has passed the Senate and is now before the House Committee on the District of Columbia. Its prompt passage is being urged by all concerned in order to provide for the District of Columbia the necessary machinery and funds to start urban redevelopment in coordination with the emergency measures to meet the extreme housing shortage.

The District Commissioners have secured allocation of their share of temporary houses for Veterans, and an appropriation for the funds they need to connect these houses with utilities is now on its way through Congress. It appears possible to provide sites for these houses on public land without violating the principle that they should not be located on developed park or playground space when they will do injury to permanent park values or will occupy space needed in the near future for recreation, or will be such a violation of zoning regulations as to do actual injury to adjacent privately owned property. The needs of the Universities for temporary housing for their Veteran students are being met adequately by the construction of such dwelling units on lands owned by the Universities.

A bill establishing a comprehensive policy and building program for the Federal Government was introduced and appeared to be favorably considered by the House Committee on Public Buildings and Grounds, but was not reported favorably to avoid any possible interference of Federal construction with the more urgently needed construction of dwelling units, especially in the face of the existing shortage of building materials. Consequently, a shortened bill was reported authorizing the acquisition of certain lands that would inevitably be needed and were threatened with expensive improvements in the immediate future. Essentially, the program as presented in the bill, which is being now held pending a greater availability of building materials, contemplated that, after utilizing sites already acquired by the Federal Government and approved for certain buildings in the past, Federal buildings to be constructed in the future would be located east of the Capitol along East Capitol Street between Constitution Avenue and Independence Avenue extended. From the city planning standpoint, this program is important, because it will tend to relieve the congestion of arterial streets west of the Capitol and there is every reason to expect that the location of employment centers for thirty to fifty thousand Government employees east of the Capitol will have a very stimulating effect on the rehabilitation of the excellent residential areas to the north and south of East Capitol Street which have been quiescent now for many years.

IN THE STATES

Indiana's Planning Program

KENNETH L. SCHELLIE, Director, Indiana Economic Council, Indianapolis, Ind.

IT IS a pleasure to address the Citizens Conference on Planning on the subject of Indiana's Planning Program because it is to citizen groups that we direct our principal attentions, and it is through such groups that we look for the realization of Indiana's planning program. If we hold to one belief insofar as Indiana is concerned, it is that the future of our State rests with the individuals who comprise the State and its communities. Progress comes through the thought and the labor of the individual and the pooling of the resources of the individuals.

Government can aid—no one would deny that—for that is the purpose of government. Government can smooth the way. Government can make collective resources available for use. Government can give guidance into expanded fields. Government can tap extra resources and provide some measure of needed regulation. But government cannot provide the means and the wherewithal for the progress of our communities. As individuals, as neighbors and friends and co-workers, our citizens must attack their own problems, understand them and plan to meet them. Government can be used to advantage. But you cannot depend on government to do the thinking or to provide the sinews of progress.

Government is slow, cumbersome. Government lacks imagination. Government is hamstrung by restrictions. We cannot look to government for the solution of our problems of the future. We must look to the individual, to initiative inherent in every individual and to the freedom of action which the individual enjoys. Governmental paternalism has wrecked many nations. When the people of this Nation, or of a State or a community become dependent on government for leadership, for guidance and for the sinews of progress, we shall become a sunken Nation, a group of worthless communities.

We hear a great deal of planning these days. In every field of endeavor, there is talk of planning. Planning is on every tongue. Yet I am astounded by the apparent failure of most to transform the talk of planning into reality. I refer particularly to community planning. It is well known that the great business organizations are charting a course for the future and are transferring those charts into the tools of production. They are gathering their resources for the great era of competition which seems ahead. But there is reason to fear for the future of the farms, and the villages, and the cities and the counties of tomorrow unless there is less talk of *planning* and more planning action. So, if we in Indiana have a message, perhaps it is that there is a crying need for sound and constructive study of the needs of each community, more

thought given to meeting their future requirements and more sound methods for fitting such studies into the world of tomorrow.

The State of Indiana practices what it preaches. Governor Ralph F. Gates has recently instituted a series of State Governmental Service Conferences, which are held, from time to time, in the major communities throughout the State, where the heads of the state departments, including the Governor, set up a temporary state capitol for a day and meet with high school students and the residents of those communities to discuss state governmental activities, programs, and problems as they may develop or occur in those places.

Five such meetings have been held and more are anticipated in the future to permit the people of every community of the State to have the benefit of a close relationship with the administrators of our state government.

The State of Indiana also believes in the decentralization of its governmental activities and several state departments now operate through a series of regional offices or representatives. Most recently established were five regional health centers under the State Board of Health, each of which is complete in its facilities and staff in a manner equivalent to the principal center which is located in Indianapolis. Such a program of decentralization provides the people throughout the State with the same quality of service, close at hand, with which they were previously familiar only by correspondence or through making a trip to the state capital.

The State of Indiana also believes in utilizing the planning process to improve its situation. The Economic Council is the state planning agency, and it cooperates with other state departments as well as with local units of government and community groups in advancing the welfare of the State.

This office cooperates with the State Aeronautic Commission in establishing its planning program, and with local groups who are interested in solving their airport problems by means of the planning process. We have assisted the Aeronautics Commission in preparing a state airport plan and, at their request, will again assist them in revising and bringing that plan up to date. However, in itself, such a plan will not be complete. The state plan cannot study in careful detail all of the requirements of all of the communities in the State. We have, through the experience of working with one such community, developed a procedure and a program for preparing plans for the airport requirements of the metropolitan areas in the State. A plan has been prepared for the Indianapolis and Marion County area which establishes the pattern for the other large population centers of Indiana.

The participation part of the Economic Council in airport planning matters has been, perhaps, more extensive than in the case of other departmental planning programs, but it serves to illustrate the useful-

ness of a state planning agency to other divisions of the state government through the medium of cooperation.

Some of our departments, through the process of development over a period of years, have instituted excellent planning programs of their own. The Indiana Department of Conservation is an example. That department has, as one of its major divisions, a planning department which is concerned only with the planning programs of each of the other divisions.

Many of you are familiar with the excellent state park system of Indiana. You may be interested to know that the planning division has now recommended a twenty-five-year development program which will increase the number of state parks from fourteen to twenty-eight, and will provide a state park area of high quality and good development within 35 miles of every resident of the State.

Here again citizen participation in a planning program has played its part. In the process of the development of this state-park plan, local groups throughout the State are invited to offer suggestions and consult with the planning division in recommending suitable areas, probable types of development, and use for the proposed areas. People of Indiana are actively engaged in planning.

Our state forestry program is developing in much the same way. We have, of course, a state forest program and a national forest in process of acquisition, but we are also well acquainted with the fact that the principal forest resources of the State of Indiana lie in the hands of the farmers and that, in addition to being a farmer, almost every one of them is also a forest operator.

We have a forest program developed jointly by Purdue University and the Division of Forestry of the Conservation Department which provides all of the farm forest operators with the best information on forestry practices, and a program for such forests, which we confidently hope will make every woods area profit producing.

A recently established Flood Control and Water Resources Commission is formulating its development program, not on the basis of huge engineering works but rather on one of headwaters control by means of small retention reservoirs, which we hope, in time, will eliminate the necessity of the large monumental type installations which, in many instances, serve only to accentuate the problems of flood control and do nothing to eliminate them.

The act establishing the Economic Council includes the direction to study all of the problems which affect our economic life, the physical improvement of the State, the best use of our natural resources and the general well-being of Hoosiers. We are asked to make reports on those problems and recommend plans of action which wil meet our objectives. There are some of them which can be handled, and should be undertaken as state problems, and attention is being given to them.

We are now, for example, completing a comprehensive study of transportation in Indiana. A complete inventory of all transportation facilities in the State—their use and effectiveness—how well they are serving the people and what can be done to improve service, their cost, efficiency and safety. Such a study is of interest to the entire State because it affects all of our interests.

But we seriously question the advisability of depending upon state-developed programs to produce the planning which is required to make the most of Indiana's resources and to create communities in which people will desire to live.

We feel that the proper approach in meeting such problems as exist in our State is that of having the people of the State recognize those problems, set the machinery in motion that will give them careful study and then make certain that the corrective measures that are indicated are put into effect. We are proceeding on the premise that if all of the small problems within the State are cared for, large problems will not develop.

There is much educational work to be done to create the interest on the part of local groups to recognize their local problems and in getting them to do something about them. Local planning progress in Indiana has been slow—disappointingly slow. City planning and zoning acts have been on the state law books since 1921; the county planning enabling act since 1935, and yet it is difficult, if not impossible, to point to any municipality or county which has made any real progress in planning action. Some very fine plans have been made, but unfortunately are serving no more useful purpose than to collect dust. And they are collecting dust because the people of the community were left out of the picture when those plans were prepared and they, therefore, have no interest in them. Public officials cannot proceed without the backing of citizen groups. And they have not had that backing.

I believe that fault for this disinterest lies chiefly with the citizens themselves—their lack of concern about the future of their communities has been an expression of government "for the people", not "by the people". On the other hand, public officials and agencies of government have also failed in not taking their planning problems to the people. Where that has been done, good results have followed.

As a state agency, we are actively engaged in calling the attention of our people to the problems which lie before them. We feel that it is appropriate to do so as our communities must be in the best possible position to attract and hold industry. The industrial decentralization trend which is so well indicated over the country is going to have a very profound effect upon the economy of our State. We want to make certain that the effect will be good, that our industrial activity will increase; and we are impressed with the fact that industrial management is showing a large concern for the type of living conditions and the munici-

pal services and the character of recreational, social and cultural opportunities which a community can offer. Good planning is good business.

We are also aware of the condition which is rapidly developing around our cities and towns. People are decentralizing too—and to a considerable extent. This factor complicates local government to a marked degree. It upsets the normal patterns of governmental services by placing new demands for urban type services on rural areas. It may also create health, sanitation, delinquency, welfare and public safety problems that so frequently develop in the urban fringe. Such development, which starts out as low cost development can very well become the most expensive type in terms of governmental costs. Here again, good planning is good business.

Our educational program in this field, though just getting under way, is broad. We make appearances at public meetings and before civic groups, use the press to advantage, and will soon release a booklet on Community Planning which has been prepared for public interest. This booklet is not a technical dissertation on the subject—of which there are many and about which few people outside of the profession care a hoot—it is a presentation of the case for community planning that will interest our citizens in planning and in getting them to do something about it. We recognize that selling is a professional job and have had the booklet prepared by an outstanding advertising agency experienced in selling programs. We are determined to do for community planning in Indiana what Steve Hannegan did for the bathing beauty in Florida.

The follow-up on the educational program is a series of district planning conferences throughout the State. We have set up nine districts of from eight to fourteen counties—the counties in each district being as similar in economic and social characteristics as geographic conditions would permit—and will hold a one-day discussion conference at a central location in each district. Public officials and citizens groups will be invited, the public will be welcome, and while there will be no speeches, panels made up largely of local people experienced in planning work will be on hand to discuss problems of planning organization, procedures and techniques that will be helpful.

In this local planning work we are, of course, giving support to official city and town and county planning commissions. We want official recognition of planning problems and action on them. But we want such commissions to be close to citizen groups. In this connection, we have recognized for some time that our local planning enabling acts are deficient in some respects and are in need of revision. We have been instrumental in setting up an advisory committee on planning legislation which is now studying the problem and will make its report in May. While I am not familiar with all of the recommendations they will make, I am quite certain that the committee will recommend that the planning

commission enabling acts require that citizen advisory committees of from 20 to 60 members, depending on the size of the city or county, be established to work with the official commissions. Such a measure will insure citizen participation in planning matters and provide the "missing link" between official and citizen groups. We look to that provision as an important aid in making planning effective in Indiana.

Indiana's planning program is a broad program. It includes the use of good planning procedures by the departments of state government, procedures which include a close relationship with the people of the State. It involves the study by a state planning agency of those problems that are of common interest and concern throughout the State; studies which are undertaken not for the glory of the technique, but for the purpose of finding out what should be done and then doing something about them. But the most important leg on our three-legged planning program stool is that of community planning—the part that is so fundamental and necessary if our State, or any other for that matter, is to grow and prosper.

Indiana started out as an agricultural State; we are now composed of almost equal parts of agriculture and industry. The farmer and city man must join together in making the pattern for the future. The interest of one is the interest of the other, and together they make up the sum of the State's interest. Their participation in planning Indiana's future is vital. We intend to make the most of it.

Cooperation of States and Cities on Through Highways

DEWITT C. GREER, State Highway Engineer, Austin, Texas

AS STATE Highway Engineer of Texas for the past six years and as a member of the Texas Highway Department for the past nineteen years, it has been my opportunity to observe and have part in many matters dealing with the cooperation of this State and its cities on through highways. I know of no better way to cover the subject of this talk than to base it on our experience here in the State of Texas.

In my opinion, the financial arrangement or the source of funds has a great deal to do with the type of state-city cooperation on highways. It would therefore follow that each State having a different financial arrangement may be required to have a different type of cooperative policy with cities.

In Texas the motorist pays a total of 5½ cents tax on each gallon of gasoline, and 1½ cents is the Federal tax and goes to Washington. The remaining 4 cents is the State tax. Of this 4 cents, 1 cent goes to help support the public school system. Another cent goes to pay off old bonds voted for the construction of highways many years ago. The remaining

3 cents less a small amount for collection goes to the State Highway Department for the construction and maintenance of highways. On automobile license fees in Texas, approximately 60 percent goes to the County Commissioners' Courts for the operation of their road system. The remaining 40 percent goes to the State Highway Department for the construction and maintenance of highways.

Texas is a part of the so-called "Solid South." The Solid South quite often speaks of the term "State's Rights." We in the Texas Highway Department not only believe in State's Rights, but we attempt to practice it, especially in our cooperative effort with our cities on highway developments. We feel that it is a poor rule that doesn't work both ways. If we do not like the idea of the Federal Government dictating to us everything we do, then in turn, the State Government should not perform such dictatorial actions toward the lower political subdivisions such as the cities. We rather feel that our adherence to this principle has contributed more to the success of our cooperative effort with our cities than any one thing.

About three years ago, the Highway Commission established a written policy whereby the Texas Highway Department would enter our cities, and maintain and construct the highway routes through such cities with the possible exception of maintenance in congested downtown areas of the larger cities. The Commission went further than this, however, and stated that we would enter the cities with our forces and our money only if we were requested by the city to come in. In other words, we did not just automatically take over the highway routes through cities. We made it optional with the city as to whether or not they invited us in. It might seem strange to you, but the last city invited us in only a few months ago.

Our next step was to establish an Urban Planning Division in the Texas Highway Department with instructions to study highway routes in every Texas city over 10,000 population. This Division was further instructed to study all of the old master plans that might have been prepared for such city, as well as Planning Commission Reports, etc., and try to get from them anything that might be of value, and then to compose a general over-all highway plan for such city. Our next step then was to submit this informally to the Official City Government, with the idea in mind that this would stimulate thought. We stated that we were not wedded to this plan, and if they had a better one, we would like to see it and see whether or not we could reach a mutually agreed plan of highway development within the city. We tried to encourage planning on the local or city level and the formation of a composite group of city officials, chamber of commerce officials, and citizens to work out a plan of their own and to initiate projects that might be submitted to the State, the principle here being to initiate from the bottom up, rather than from the top down. In general, we have tried to deal with our cities

on the basis that what we want is a general direction for the proper flow of traffic and adequate width of properly controlled right-of-way. Having accomplished these objectives, the location can weave in order to adapt itself to problems that belong to the city, keeping the general direction and the width in mind. In fact, we quite often request the city to make the location under such broad general principles of routing in order that they may adjust to given minimum right-of-way cost.

In Texas, our policy is that the city must furnish the right-of-way free of encroachments at its expense. The construction will be performed and paid for by the Highway Department, and the facility will be maintained by the Highway Department after it is completed. We believe this principle to be sound. If the project is not worth the right-of-way cost to the people of the city, then maybe it should not be built. Too often Government expenditures are not provided with a cross-check, and the expenditure later is subject to criticism. By this method of financial participation by the city, the people have a right to cross-check the state and Federal Governments, and if in their opinion it is not needed, then it is not done.

We would like to say that this method of city-state cooperation is bringing results in Texas, in that we have major projects financed and in the plan and right-of-way stage in seven of our major cities, with construction coming up in the near future on at least four of these. Agreements have been reached by the State and the city, locations have been made, city finance has been provided to purchase the right-of-way, construction plans are practically complete, and right-of-way is being secured. One of these projects that is almost ready for contract is here in the City of Dallas and is an Expressway north and south on a 200′ right-of-way, that will cost seven or eight million dollars for construction expenditures alone. The right-of-way costs in Texas in general are approximately 25% of the construction cost.

In conclusion, I would like to state that in my opinion, state-city cooperation is not difficult if we work at it. There must be a lot of give and take. Engineers must not crusade but must be flexible enough to recognize the point of view of the other political subdivisions. For instance, the state and Federal problem may be traffic and traffic alone. The city problem may be traffic plus blighted areas, slum clearance, or recreation. There is an even ground that can be found. It should be operated as partners in a business or as brothers in a family. Brothers do not always get along, and they are quite often required to get out behind the barn and fight it out, but then generally they stand united against a common foe. I believe that I can say from experience that this same principle can be applied to state-city cooperation, and it will work.

Protect the Thruways

ELIZABETH B. LAWTON, Chairman, National Roadside Council, New York, N.Y.

THE ultra-modern thruways soon to be constructed in many States will have high recreation as well as transportation value. With their grade elimination, divided traffic and controlled access, many of those in rural territory will approach the character of true parkways *if they are protected.*

Their controlled-access construction will automatically protect them, it is true, from all forms of roadside business which require direct access to the pavement. No ribbon slums of beer cafes, barbecue stands and the like can line their margins.

But from the billboard—the one form of roadside business which does not require access—the controlled-access construction provides no protection. Billboards can line up close to the new right-of-way wherever the billboard men choose to erect them. Contrary to general belief the width of the average thruway will not give adequate protection against signs. The modern billboard-de-luxe can reach the eye and command the attention over a distance of 400 feet or more.

The suggestion that billboards can be *planted out* is wholly impractical on a road of any length. The high, close hedges which would be required would impair the beauty of any road and the cost would be prohibitive.

Protection for these thruways can be assured only by a state law prohibiting the erection or maintenance of any billboards or other advertising devices within 500 feet of any thruway or controlled-access road, if visible from any point thereof.

Such a bill should be far easier to pass than the usual billboard bill, for two reasons: (1) to a large degree it will apply only to new roads yet to be constructed; (2) it cannot possibly be termed discriminatory against one industry. It is not a bill to restrict billboards and no other business. It is a bill to insure that restrictions already applied to all other forms of roadside business shall apply also to outdoor advertising.

The Intent of the Billboard Interests. That the billboard industry intends to have a free hand along these postwar roads is already indicated. The 485-mile thruway planned by the State of New York, to pass along the scenic valleys of the Hudson and Mohawk rivers and the shore of Lake Erie, was authorized by a bill which originally provided that no advertising signs could stand within 500 feet of the right-of-way. *This provision was deleted from the bill before it came to vote, due to the pressure brought by the billboard industry and its allies.*

Yet this New York Thruway, if protected, would be one of the outstanding roads in the entire country. What right has the billboard industry to appropriate it for advertising? Billboards along the highways hold their position not by right but only by sufferance. A state or

municipality may restrict or even prohibit highway advertising without depriving either the property owner or the billboard owner of any constitutional rights. So declares the Supreme Court of Vermont (Kelbro, Inc. v. Myrick, as Secretary of State, 113 Vt., 64; 30 Atlantic Reporter, 2nd, 527)

The Billboard Industry Suggests Cooperation. The billboard industry is making every effort to persuade State Highway officials that the thruways can be protected without a law. The method proposed is the old discredited method of *billboard cooperation.* The Industry promises to coöperate with the State to keep out all *objectionable* billboards. State officials who have had insufficient experience with the billboard industry, or are politically timid, sometimes fall into this trap. But those who have had repeated experience with billboard *cooperation* and with the industry's conception of what constitutes an *objectionable* billboard, are not impressed.

Why should State Highway Commissions and officials attempt to cooperate with organizations which are today opposing not only every state bill for roadside control but also every effort for town and county zoning, and all bills, both Federal and state, for wider rights-of-way, for freeways and for parkways—the very methods by which the Federal Public Roads Administration seeks to promote safety?

What Are The Billboard Fronts? Few people realize the extent and power of these "billboard fronts" organizations. Briefly, here is their origin as revealed in an official report presented to the American Highway Sign Association in December, 1940. The billboard industry, appalled by the fact that planners and zoners, also the American Automobile Association, the National Association Real Estate Boards and the Federal Public Roads Administration, were advocating roadside zoning, set out to find allies who would support the billboard industry in its obstruction to all forms of roadside control. The Petroleum Industry, the Brewers and some Labor Unions agreed to cooperate, the report stated. When efforts to secure the cooperation of the Farm Bureau and the National Grange failed, the American Highway Sign Association started a new *farmer* organization of highway property owners, to be known as the Highway Property Owners Association, who would agree to fight all roadside control bills. This stooge soon proved so valuable that in January, 1945, the Billboard Industry widened the field by organizing all tourist courts, motels, and gas stations in an over-all group to be called the Roadside Business and Property Conference. This group held its second meeting under sponsorship of the American Highway Sign Association, in January 1946. It is now actively used by the Billboard Industry to fight all town and county zoning, all roadside control bills and all efforts for construction of wider roads, more freeways and parkways.

How The Billboard Front Is Used. This is how it works. When a roadside bill or a freeway bill is introduced in a State where the Highway

Property Owners Association has not yet been formed, leading billboard companies in that State write to all of their "lessors" (the farmers who rent land for billboards) urging them to join the new association. The farmers are to be involved in no expense. They are merely to carry out orders when notified to oppose certain bills by protesting to their legislators. In all cases they are primed what to say. In many cases even postage is provided.

Thus the flood of letters from protesting farmers, which so often defeats a state bill or a county zoning effort, comes from those farmers who profit financially by the billboard business. The over-all group of tourist courts, motels and gas stations is used in the same way.

The Foes of Freeways. Evidence of the power of these billboard fronts comes from many States. Oregon's recent effort to pass a freeway bill prepared and sponsored by the State Highway Commission, was defeated by the opposition of tourist courts, and gas stations, led by the billboard industry. Pennsylvania's freeway bill was openly fought by the Petroleum interests which frankly stated that they will favor no bill giving blanket authority to the State to construct freeways, although such blanket authority is recommended by the Public Roads Administration.

The Petroleum Industry declares it is not opposed to freeways "in principle" but insists: (1) that each proposed controlled access road must be specially approved by the legislature; (2) that the State shall not locate State-controlled gas stations, and restaurants on these roads, but that all needs of the motorist shall be provided by privately owned stations located on the abutting property along the right-of-way; and (3) *that the State shall provide access to these stations.*

The Petroleum Industry, backed by the billboard *fronts*, has won all three of its demands in the recently enacted freeway law of New Jersey. And the second and third demands in the Pennsylvania freeway law. We submit (1) that the Highway Commission, rather than the Legislature, is the proper body to decide when and where traffic conditions demand a controlled-access road; (2) that the requirement that each proposed freeway must be specially approved by the Legislature is intended to give the opponents a better chance to kill each proposal and will result in fewer freeways; (3) that to compel the State to build access roads to privately owned stations on abutting property will mean a marked increase in the number of access points. Since the efficiency and safety of the controlled-access roads depend largely on reducing access to a minimum, the demands of the Petroleum Industry and its allies will lower both speed and safety on these freeways.

A New Era in Highway Design

CHAS. H. SELLS, Superintendent, New York State Department of Public Works, Albany, N. Y.

FOR fifteen years, depression and war made impossible the execution of any normal highway construction and maintenance program. Nearly three-quarters of a billion dollars worth of work had been deferred and remained undone in New York State alone. VJ Day found the New York State Department of Public Works ready to swing into action and by April 1946 the number of contracts awarded and in force totaled close to 70, involving work which will cost about $30,000,000. Five times this figure is anticipated before the end of 1946.

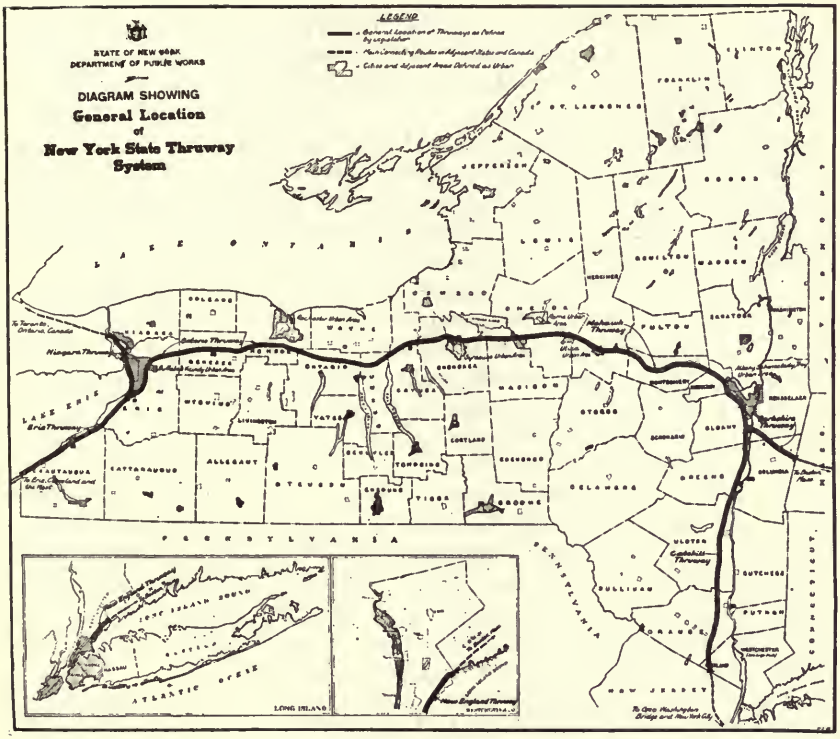
Probably the most spectacular project in the postwar highway program of any State in the Nation is the development of the New York State Thruway System. This cross-state expressway connecting the two most important cities in New York State and serving nearly 90 percent of the State's population and industry, has been described as the "Greatest Highway in the World." It is the most important single engineering undertaking by New York State since the digging of the Erie Canal in 1817. Based on pre-war estimates it will cost $202,000,000 before it is completed.

Because the Thruway and the arterial routes which will connect with it are based on the wartime planning which has gone into New York's $840,000,000 five-year public works construction program, no better example can be found to illustrate how New York State is planning for the expansion of its highway system into one which will enhance the well-being of all its people as they seek prosperity in days to come.

Construction of the Thruway which will span the State from corner to corner and provide a means of fast, easy and safe local and through highway communication will be started in the spring of 1946. Fraught with tremendous economic importance to the State, the Thruway will not only parallel the water routes developed and used for the historic Erie Canal but will also be its 20th Century counterpart as a stimulant to growth in every section.

When completed within the next five years the Thruway will not only connect the State's two most important ports, New York City and Buffalo, with express highway facilities; it will span and serve its most densely populated and most highly industrialized sections.

Within a belt extending thirty miles on either side of the new Thruway is a region representing approximately 50 percent of the area of the State. But, viewed from other angles, it assumes still greater proportions. In addition to the huge number of persons living within that belt, there are also located there almost 81 percent of all motor vehicles registered in New York State. It also includes 86 percent of all the State's buses and trucks. Almost 90 percent of all money collected by the State for



vehicular and operators' licenses is obtained in that same area. Existing highways spanning it have the highest traffic counts of any in the State. Industrially and commercially it is equally important.

Present highway facilities in that "L" shaped region have been found inadequate to accommodate the demands placed upon them. Annual traffic counts reveal this situation. Many cannot be expanded further because of prohibitive land and construction costs. They are rapidly approaching the saturation point and the only practical solution lies in the construction of an entirely new route—the Thruway.

The Thruway System will be a 486-mile multiple-lane highway with divided arteries separated by safety malls of varying widths. Rights-of-way will have a minimum span of at least 200 feet, affording ample opportunity for further expansion, if necessary, in years to come. Sight distances will be no less than 1000 feet at any point with a minimum radius of curvature set at 2800 feet. No grades in excess of 3 percent are planned.

Actual construction work is being preceded by countless days of planning and preparation. Every element involved in highway con-

struction work will project itself into the Thruway program. Almost every type of terrain to be found in the state will be encountered and traversed by the Thruway. Each presents its own specific problems for which provision must be made.

Rights-of-way are being explored and obtained. Advance surveys determine what work is required before pavement can be laid. Grades must be established and developed by cuts and fills. Sites at which bridges are necessary must be established, test borings made to determine foundation requirements and structures designed for each location.

Working side by side with the survey parties will be the Department's Landscape Engineers who will assist in right-of-way design in order to produce a highway which will blend into the natural scenery of the area traversed. Safety engineers will assure a hazard-free route. Subsurface conditions will be determined and provided for by the Soils Engineers.

Bids have been advertised for three sections of the route. The blueprints presented will be an integration of all the planning done beforehand. Construction standards for the Thruway have been set on a high plane. Scores of bridge structures will be built along its course both to eliminate grade intersections and to carry it over natural barriers. These will be designed not only for utility but will be engineered for safety. Their pattern will be both modern in style and pleasing to the eye. The nine-inch pavement to be applied to the roadbed will be more than adequate to sustain all types of traffic.

The southern extremity will be on the New Jersey border from which point it will be connected with the George Washington bridge entrance to New York City by high-capacity New Jersey routes. From that point it will swing northerly toward Albany, thence westward across the Mohawk Valley serving Schenectady, Utica, Syracuse, Rochester, Buffalo and intervening communities. From Buffalo it will veer to the southwest to terminate at the Pennsylvania State Line near Erie.

The Thruway System is divided into seven main sections. The portion known as the Catskill Thruway extends from the New Jersey State Line near Suffern to a point near McKownville, west of Albany. The Mohawk Thruway extends from that point to U. S. Route 11 north of Liverpool. From there it will be known as the Ontario Thruway the westerly terminal of which will be at Cazenovia Creek near Ebenezer where the Erie Thruway will begin, continuing to the Pennsylvania State Line.

Connecting with these sections will be the New England, Berkshire and Niagara Thruways. The New England Route will extend from a point near the intersection of Bronx and Pelham Parkways across Westchester county to terminate at the Connecticut State Line.

The Berkshire Thruway will extend easterly from the Catskill Thruway from a point near Becker's Corners to Massachusetts near the hamlet of State Line. The Niagara Thruway will connect the Erie Thruway, in the Niagara Frontier section with the Rainbow Bridge in Niagara

Falls which in turn is one of the southerly terminals of the Queen Elizabeth Highway, the Province of Ontario Thruway.

Three, and possibly four, portions of the route are scheduled for construction in 1946. These initial projects will be on widely separated sections. One will involve construction of a portion of the Erie Thruway in the western part of the State. Portions of the Ontario and Mohawk Thruways will be progressed with construction work in Onondaga county extending along the Thruway route north of the city of Syracuse. The third project which is scheduled will be on the Catskill Thruway in Ulster and Greene counties, with work being done between Catskill and Saugerties.

The Thruway is basicly an interurban route. Its generous proportions and special features will enlarge its carrying capacity beyond that of comparable standard highways. Its very continuity will make it a superb expressway from New York City to the Great Lakes region and it will course its way through some of the most scenic sections of the State.

Urban as well as rural economy will be enhanced by the construction of the Thruway. New gateways to the many vacationlands of New York State will be opened by it.

The entire route will be devoid of obstacles to the easy flow of traffic. Intersections at grade will be non-existent. No traffic lights will blink along its course. Bridges and underpasses will be provided for cross traffic with access and egress to the Thruway limited to those points at which appropriate traffic interchange facilities will be built. Acceleration and deceleration lanes will be provided at such junctions to permit the traveler to enter or leave the Thruway with a minimum of difficulty and and a maximum of safety. Plantings will be accomplished on the separating malls wherever necessary to provide effective screening of the headlights of approaching vehicles.

The economic significance of the Thruway has been evidenced by plans already made by large industrial organizations to seek factory sites along its route and at points sufficiently near large centers of population from which manpower may be readily obtained.

A study of the Thruway map, depicting its course as now defined by legislation, will indicate its close proximity to the cities it will serve. Maximum benefits will result from this policy. Adequate arterial connections will be provided between such urban centers and the Thruway. Property values will be enhanced in regions served by the express highway and its connections.

The controlled access features which are an integral part of the Thruway design will greatly reduce driving hazards and expedite traffic movement. It will be an avenue leading to a new and prosperous tomorrow. Its construction marks the opening of a new era in highway design.

Supplementing the Thruway program New York State moves into another new field of construction activity this year as it tackles the problem of construction of state highways within urban areas.

Development of new traffic arteries in the urban centers of the State is one of the most cogent challenges facing highway planners today. Existing streets, leading to the business and industrial sections of many cities, are vestiges of days long gone by. When built, they were more than ample for the little traffic which moved over them. Motor transportation was then beyond imagination.

Established roads exerted untold influence on the further expansion of the community as it grew to city size. But, where once they helped promote the general welfare of the city, today because of unplanned expansion, their inadequacy has become a deterrent to the city's continued well-being.

All too often it takes longer to go from the fringes of a city to its downtown areas than it does to drive to points 25 or 30 miles beyond. A recent survey of conditions in one city reveals that 17 minutes are required to travel a single mile through its business section and 18 more minutes to a point only two miles out of that region.

Commerce and industry have suffered materially as a result. Where possible some are seeking new locations in the less congested areas. Others, rooted to present sites by characteristics peculiar to themselves, are seriously handicapped. Consumer markets suffer too when easy access to them is denied. In fact the economy of an entire community can be greatly influenced by the transportation facilities available.

The New York State Department of Public Works has a $119,000,000 arterial route program to be undertaken during the next five years. First ground will be broken this year. Projects, designed to eliminate the urban bottlenecks in many communities and at the same time efficiently serve regional and state traffic, will continue steadily until the program is complete.

Until 1945 the state highway system terminated at the corporation limits of its various municipalities and the burden of handling all traffic within the cities was left with the local taxpayer. Attempts made in some locations to relieve this burden by the construction of by-passes, routing traffic around the communities, afforded some relief, but the problem as a whole was far from solved.

Studies showed that a vast majority of traffic wanted to get into and out of the cities. Sections which could not be reached conveniently ceased to progress and often became blighted. Many local communities, already overburdened with taxes levied against real estate, were not in a financial condition to undertake the necessary construction required to alleviate the situation.

Continued congestion could easily result in a spread of blight and economic dry rot which now so seriously menace urban property and tax

values. On the other hand the expenditures necessary for providing adequate facilities for through routes alone, if borne by the cities, might increase tax rates to such an extent as to cause a flight of capital from within their limits and create consequent untenable tax and financial programs.

Favorable action by the Legislature and the Governor on the Department's 1945 recommendation for legislation to enable it to bui d these arterial routes at State expense made necessary construction possible. Now the city will be called upon to finance only one-half the costs of any necessary rights-of-way.

State funds to be allocated to such work will be supplemented by money made available from the Federal Government under the terms of the Federal Highway Act of 1944 which now authorizes the State to use part of its share of Federal funds for the development of adequate arterial routes within cities.

At first glance the problem might seem simple. The reverse is true, however. The proper solution requires a broad and comprehensive study of a great many factors. No two cities of the State present identical problems. Each treatment must be strictly tailored to meet the needs of the community concerned. In one city of New York State, five major highways converge in two short blocks of its most important business section. Two others have eleven major approaches on each of which are relatively high daily traffic counts. Similar complexities arise in the street patterns of all cities of the State.

In planning for the arterial program the Department's ten District Engineers have been charged with the responsibility of making original studies leading toward the development of an overall, master plan. In the preparation of their studies the engineers solicit from the City Engineers, Planning Commissions, Zoning Boards, Housing Authorities and other Municipal officials, such basic data as may have been collected by such groups in the past and which form the foundation on which a truly comprehensive arterial route map must be built. In the event city authorities do not have such information at hand it is the responsibility of the District Engineer to develop it with his own organization.

The tentative master plans for State Arterial Urban Routes are being submitted by the District Engineers to the Main office at Albany for review by a new division now being developed within the Department there, to be devoted entirely to such work.

After the State has developed a master plan which it believes will solve the transportation problems and redound to the best interests of the municipality and the State, it will be presented, in complete report form, to the municipality affected, for consideration and review. This procedure will be followed to assure plans with which there is real local agreement before being officially adopted by the Department.

When such plans have been established they will then serve as the

basis for the Department's year-by-year, detailed construction work. Projects for construction will be selected from the master plan in accordance with their need and available financing.

If, during the course of preparation of detail plans for a particular improvement, the city should desire to enlarge upon the facilities over and above the work proposed to be done by the State, it can be accomplished through a provision in the City Arterial Law. Where such enlargements are requested and approved, the State will bear the full cost of the basic work. Extra costs resulting from additions proposed locally will be borne by the community involved.

Full consideration is being given to the needs and potentialities of each community. Points of congestion are being studied, alternate routes considered, all possible solutions are being weighed. Such studies, made on the spot, assure the acquisition of positive data on which to lay plans for the future.

This program is not set up merely to repave existing streets in order to improve rideability or to widen pavements one or two feet to provide better parking. Rather it is designed to withdraw traffic from heavily congested streets by providing, in some instances, entirely new arterial routes, to eliminate traffic bottlenecks and to keep much unnecessary traffic from entering downtown or other areas of mass employment, yet be designed to serve those sections. Some arteries may be elevated, others depressed, while the bulk will be at street level. But each will be designed to fit into existing street patterns and to harmonize the whole traffic-bearing system into an integrated unit. Better cities should result.

These are but two phases of the $840,000,000 program on which New York State will be engaged during the next five years. They are outlined in detail because of the great impact they will have on the economy of the people in years to come.

But of equal importance is the work which is scheduled for the standard highway system of the State. Nearly one-third of New York State's 14,500-mile state highway system has become outmoded and inadequate for modern traffic. The same percentage holds true for its hundreds of bridge structures.

During the coming years the Department of Public Works will bend its every effort to overcome these inadequacies by proper repair, construction or reconstruction so that new standards to be applied in the development of all new routes will be duplicated in the vast labyrinth of existing state highways which tie its many communities together. Funds earmarked for such work amount to $368,000,000. Another $132,000,000 will be used for grade crossing eliminations and parkway construction with $19,000,000 more set aside for canals and other public works

During the depression years New York was restricted in its highway operations by limited appropriations. These moneys are gone forever. But surplus funds accumulated during the war were wisely put aside by

Governor Thomas E. Dewey and the State Legislature so they could be used for highway construction when peace returned once more. In consequence New York is now enabled to launch its great program with more than $500,000,000 in the till to foot the bills. Thus will New York State's people be provided with vitally-needed new highways without having to pay more taxes.

The whole program, representing twenty years of deferred work rolled up into five, has but one aim—to give New York State the kind of highways which will provide for its people and its industries arteries over which they can drive with pleasure and with safety and which will bring to them the prosperity which they so earnestly seek and to which they are justly entitled.

New York means business. So do its highways.

REPORT OF DISCUSSION

WILLIAM H. KESSLER, Birmingham, Ala., *Leader*
JAMES T. DE JARNETTE, Atlanta, Ga., *Reporter*

John Redditt, Chairman Texas State Highway Commission effectively killed any heated discussion of the addresses presented by announcing that discussion of the three papers by the hundred odd conferees would be limited to twenty minutes In spite of this inauspicious beginning the group expressed keen, intelligent and sometimes envious interest in Texas' plan for cooperating with its many municipalities and urban areas. Of particular interest was a discussion of the planning, construction and maintenance of expressways through urban areas. An interesting comparison of construction costs arose when it was revealed that expressway costs in Texas are averaging one million dollars per mile—all borne by the state and Federal government—plus approximately twenty-five percent additional for right-of-way acquisition borne by the municipality. In New Jersey an example was cited where the land acquisition cost alone was running between six and seven million dollars per mile!

In response to a query from the floor as to how municipalities could finance such improvement, it was revealed that the new Federal-aid bill will allow expenditure of Federal funds for one-third of the acquisition cost for creating expressways.

Several alternate solutions were offered from the floor on methods of roadside control which Mr. Shurtleff had effectively presented in his address. In response to these suggestions, Mr. Shurtleff admitted that many solutions existed, that it was the problem of the planner to seek and use the most practical solution—be it legislation, acquisition of additional right-of-way or the construction of paralleling service roads.

The Texas state highway engineer referred to the development of roadside parks in Texas. He stated that they hoped to develop such facilities every twenty miles along the entire highway system with development confined to tracts usually consisting of less than two acres.

He commented that the highway department had received more favorable public comment for this wayside development than it had for the quality of surfacing it had been able to maintain—particularly during the labor, materials and equipment shortages of the war years.

EDITOR'S NOTE—For Mr. Shurtleff's paper, see *Planning and Civic Comment*, Oct.-Dec., 1945.

State Legislation for Urban Redevelopment

SEWARD H. MOTT and MAX S. WEHRLY of the Urban Land Institute

DURING the past six years the question of developing remedial methods to deal with the decadence and decline of the central parts of our cities has been receiving increasing attention. Much of this attention has been properly directed at the slum and blighted conditions to be found in the once desirable residential areas which spread outward from the central business and commercial districts. Until recently, however, insufficient attention has been given to the aspects of commercial and industrial blight, and to the interrelationships which exist between blight and transportation, improper and uneconomic land use, tax policies and legal problems. The Urban Land Institute has taken a leading part in stimulating interest in this phase of urban redevelopment and in analyzing legislation which has passed or is being considered in the several states.

Conditions which affect such legislation vary greatly throughout the country. Questions of existing law, financial condition of the municipalities within the State, availability of private capital, sentiment of the local citizens and of the state legislative bodies; all must be taken into account.

Three different methods of attacking the problem have been put forward and one or more forms have been enacted into law in 28 of the 48 States. In general, they permit private corporations, cities, and in several cases, towns, counties and regional districts, to engage in some form of redevelopment program.

Redevelopment legislation may be classified generally as follows:

GROUP I—Redevelopment Corporation Laws permitting private corporations to engage in redevelopment.

GROUP II—Housing Redevelopment Enabling Acts which make the public housing authority the administrative as well as constructing agency.

GROUP III—Redevelopment Land Agency Enabling Acts which establish a redevelopment or land agency as an arm of the local government to administer the redevelopment program.

We will consider the three types of legislation in the order listed.

GROUP I—The Corporation Law is the earliest of the three methods developed. Twelve states have passed such legislation: Illinois, Indiana, Kansas, Kentucky, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, Wisconsin, and Virginia.

The bills covered by Group I and Group II are actually housing bills rather than redevelopment legislation. They both propose to clear slum areas largely through the erection of housing projects, Group I using private capital, Group II using public money or credit.

In theory, the public housing projects are for those of the lowest income, while the redevelopment corporation projects are not necessarily for this group. However, due to tax abatement or other subsidies, the redevelopment corporations are expected to provide decent dwellings for lower rental groups than would otherwise be possible.

The chief differences in Group I bills are that in the Illinois, Kansas, Missouri, Virginia, and Indiana Acts, the land is assembled by the corporations, which are given powers of eminent domain. Under the New York, Kentucky, Michigan, New Jersey, and Wisconsin Bills, the municipality retains the powers of eminent domain and assembles the land for the corporation. Partial tax abatement and also limitation of the dividends are usual features of these Acts. The recently passed Virginia law which applies only to Richmond gives the planning commission considerable authority over location and plan for any redevelopment project.

To date, the only project which has been definitely set up with detailed plans under this sort of legislation is Stuyvesant Town in New York City by the Metropolitan Life Insurance Company. This is a huge housing project, and due to the high cost of land assembly, 13-story apartments were found necessary with a density of 445 persons per net acre. This is over twice the previous density. The expected rental is approximately $14.00 per room per month. No provision has been made for schools, library, churches, or similar community facilities.

The Metropolitan Life has also been working on a large housing project for Negroes in New York City.

The long-range benefits to the city from this type of legislation are to be seriously questioned. It is doubtful if well-balanced neighborhoods can be created. It is probable that the existing family density will be increased rather than decreased. Due to the emphasis being almost wholly on the construction of housing, public open space and community facilities may be largely neglected as they were in the case of Stuyvesant Town. Also, opposition to tax exemption as a method of subsidy is increasing, as many feel that the amount of subsidy is hidden and that such practices will soon bankrupt our cities.

The proponents of this legislation state that it provides an excellent channel for the investment in housing of the huge sums in the coffers of the insurance companies and similar large financial institutions. In some sections of the country, particularly the South where capital is scarce, this is a most important consideration. This legislation has been fairly easy to pass and is considered by many as an opening wedge toward the further consideration of the whole problem.

GROUP II—Housing Redevelopment Enabling Acts. Six States have enacted this type of legislation: Arkansas, Florida, Illinois, Tennessee, Georgia, and South Carolina.

This type of law enlarges the powers of the local housing authority making them the development agency and in some cases a research organization. Control of housing authorities is exercised to a large extent by the Federal Government through the Federal Public Housing Authority. Bills of this type have been introduced in about 12 other States but have failed to be enacted in each case.

Objection is made to this sort of redevelopment act for the following reasons:

First: It is a housing bill, not an urban redevelopment bill. The emphasis is on the construction of public housing for the low-income group. The redevelopment of the area for the benefit of the city as a whole is secondary.

Second: Placing the administrative control in the hands of a public housing authority would tend to discourage the participation of private enterprise in urban redevelopment.

Third: A redevelopment program should not be under the control of any special interest group or single purpose agency whether it be a public housing authority or a manufacturers' association.

Fourth: Most of these bills do not mention the local planning commission, and give the public housing authority many of its normal planning responsibilities. There is very loose control by the municipality over the selection of areas to be redeveloped. No provision is made for public hearings.

It seems evident that federally subsidized public housing will continue for some years to come, but probably with greater local controls. The part of public housing in the future development of our cities, therefore, must be given due consideration. The housing of the low-income group is, however, only *one* of the problems involved in the redevelopment of urban blighted areas and should not be the controlling feature.

GROUP III—During the past several years a third type of redevelopment legislation has been developed which sets up a new agency as an arm of the local government and is made responsible for administering the redevelopment program with policy and planning functions in the hands of the governing body and planning commission.

Ten States have enacted this type of legislation: Alabama, California, Colorado, Connecticut, Illinois, Indiana, Maryland, Michigan, Pennsylvania, and Wisconsin.

A bill in this group for the District of Columbia has passed the U. S. Senate and is awaiting House action in the near future. In Ohio an excellent approach has been made to drafting legislation of this type through the appointment by the Governor of a committee composed of

three members from each of the two houses of the legislature and three citizens at large. This group is to hold public hearings preparatory to drafting a bill to be introduced at the next session of the legislature.

Group III acts are not primarily housing bills, nor are they anti-public housing bills. They are drawn to permit the cities to undertake the redevelopment of slum or blighted areas in accordance with a comprehensive plan and with the objective of securing the highest and best use of the area in accordance therewith. This use might be commercial, or for a transportation terminal, or for medium or low rental housing, or for public buildings and other community facilities. The program is administered by the redevelopment or land agency, a department of the local government composed of representative citizens, and setup as a corporate body with powers to assemble land by eminent domain and to issue bonds, receive grants, clear the site, and sell or lease the area in whole or in part to private individuals, firms, corporations, or to public agencies, such as school, park, and library boards, public housing authorities, etc. Suitable controls are set up which assure development in accordance with the plan and in a manner to protect the public interest.

Public hearings are required before the area to be redeveloped is designated, as well as before the detailed redevelopment plan is officially adopted by the local legislative body, the planning commission, or both.

The advantages of this type of legislation are:

First: It encourages the wide participation of private enterprise and the use of private funds.

Second: It provides for the redevelopment of the area so as to benefit the city as a whole, and is not primarily to provide additional housing for one income group.

Third: No particular social scheme or economic theory is emphasized.

Fourth: The control is wholly local.

Development in accordance with sound planning principles related to the community as a whole is recognized.

Under these Group III acts, if private enterprise is not interested, land set aside for low rental housing could be purchased by the public housing authority from the redevelopment agency. The location, magnitude, and type of housing built in the area would be controlled by the redevelopment or land agency, the planning commission, and the local legislative body in the general public interest.

Of the three types of legislation, Group III appears to be growing in favor, as most successfully meeting conflicting points of view, and as recognizing the need for a comprehensive attack on the problem of redevelopment.

The legislative problem was simplified by a constitutional amendment in the States of New York and Illinois where greatly abbreviated redevelopment enabling acts were recently passed. In each state, constitutional limitations should be studied.

Several cities have set up and figured test projects for the redevelopment of slum areas. They practically all indicate a considerable gap between the cost of land assembly and resale. Just how this loss will be absorbed and bonds paid off is faced by only a few of the bills reviewed to date. The general feeling appears to be that guarantees or grants from the State or Federal government will take care of this and that the great benefits to the entire community which would accrue from a sound redevelopment program well warrant this aid.

The Wagner-Ellender-Taft Bill which has passed the Senate provides $500,000,000 for urban redevelopment. It is written in a manner to favor strongly the local housing agency as the administrative agency.

In most bills in all groups, funds for the assembly of land are provided through the sale of bonds which are a lien against the redeveloped areas only and do not affect the municipal bonded debt limit.

The Indiana law, which affects Indianapolis only, is unique in that funds for land assembly are secured through a small tax, the whole municipal area being established as a special Taxing District. This amounts to 10 cents per $100 of valuation for the first two years, and 5 cents thereafter. In a Michigan law, recently passed in the State Legislature, funds may be raised either by a tax levy on a special district, or by sale of bonds. If the funds for land assembly were limited by tax receipts, there presumably would be no deficit. In many States such as Ohio there are real estate tax limitations which would not permit this type of financing.

METROPOLITAN PLANNING

Introduction:

Harland Bartholomew, Saint Louis, Mo.

ALL during the nineteenth century, as cities grew in total population and in area, their corporate limits were expanded generally to embrace very nearly all new growth. In more recent years, however, physical expansion has been so rapid and has covered such wide areas, that few municipalities have expanded their corporate limits accordingly. This raises acute problems from many standpoints and particularly from the standpoint of sound over-all planning. There is a tendency for this enlarged urban area to break up into a multiplicity of governmental units, thus destroying the basic unity of the area and making more difficult the acceptance and execution of any over-all plans that may be drawn. We have been slow to devise any new agencies of government to exercise jurisdiction over the whole area, either for purposes of planning or for general government.

We are faced with four alternatives:

(1) Extension of corporate limits of the central city; (2) Functional unification or consolidation of services such as water supply or parks; (3) A borough system as in New York or London; (4) Haphazard planning without means of enforcement.

The metropolitan area is for the most part a high-sounding title for an ordinary city which has grown over a wide area. The problems are much the same as in the average city with which we are all familiar. There is merely a change in scale. There are only twenty-three "metropolitan cities" having a population of over 500,000 persons, so that, for the most part, we are dealing merely with the problems of the ordinary city. We should not allow ourselves to be confused by any assumption that we are dealing with an entirely new form of city structure.

Many of our large cities, such as Chicago or Saint Louis, have numerous local centers of some importance, but they do not signify any change in the basic form of the city. They are the inevitable result of large areal growth. They do not signify any lack of unity in the over-all city structure. No one has proposed that Chicago be cut up into a series of small cities. By the same token there is no reason why we should assume that, as these large cities increase in total population and in total area, all new growth must necessarily be divided up into small political units. Perhaps our vision has been warped, perhaps we are less courageous in facing these problems than we were in former years. Common sense should tell us that if we wish to secure economy, good order and attractiveness in the development of our newly enlarged cities, we must have some form of unified control. Common sense also tells us that the alternative is chaos.

The so-called metropolitan community is a challenge to our modern civilization—to our vision and imagination—but more particularly to our genius in organization. We cannot have good planning if we lack the ability to devise governmental administrative units with power to enforce sound plans. The time has come when we should pause and consider not merely the technological value of the plans which we devise *B U T* our record of accomplishment in the execution of these plans. Our plans are of no value if we do not devise ways and means of putting them into effect.

Recent technological improvements in transportation have made it possible for urban populations to spread over very wide areas. Our city dwellers are being lured into suburban areas at a very rapid rate. This is highly profitable to real estate and mortgage interests. The Federal Government, through FHA, is expediting the process of decentralization. It seems to be universally assumed that we are building a new form of city with less congestion and more open areas for improved living. I question this assumption. As a city planner, I foresee greater costs, higher taxes, poor planning and larger mistakes. Isn't it time we face this problem realistically? The following papers point out some of the dangers and the difficulties of our present course in the uncontrolled growth of metropolitan communities.

Urgent Problems of Metropolitan Planning

PAUL OPPERMANN, Urban Economist, Bureau of Community Facilities, Federal Works Agency, Washington, D. C.

Introductory. Planning is a *continuous* process. A city is a growing organism. The plan must not only keep abreast of change but must attempt to visualize the future. Cities must be prepared in advance for what may come, developing logically out of the past and present. Underlying principles of growth must be understood. To the extent they are understood the planning job is easier to manage and the details are more inclined to fall in place.

Urgent problems of metropolitan planning are many. There are the problems which are urgent because they have accumulated faster than we could apply planning remedies to them. Now there is a whole new batch that is an aftermath of war. Today we have an emergency in some ways harder to deal with than the one we have just put behind us.

Let me name five problems, more or less urgent, depending upon many circumstances. The five problems are:

1. How to avoid building more slums and blighted areas.
2. How to avoid *overbuilding* some sectors of the local need for all the things that go to make up the city and avoid *underbuilding* others. This has special reference to housing.

3. How to avoid excessive decentralization.

4. How to avoid failure to relate properly *places of work* and *places of residence.*

5. How to avoid failure to provide adequate community facilities.

I do not hesitate to give *first* the simple answer: provide the Master Plan to guide all development; provide a community *blueprint* then build, through the years, using the continuing process of city planning.

It may be said of cities in general that *the community as a whole* does not yet *fully* understand the need for city planning and its many values for citizens of every rank and walk of life. This is true of metropolitan communities but it is even more specially so of citizens in smaller cities, including the suburban ones so vital in the make-up of metropolitan centers of the country.

The basic job of the planning commission is to prepare the ground plan of the whole community; the community in a physical sense. Obviously if this is to be a *sound* job it must rest upon the foundation of studies of the present and expected population and upon the financial or income facts, the social character and social needs of the community.

In preparing the ground plan (city planners call it the master plan of land use) the needs of the community for dwellings, office buildings, stores, factories, must be fitted together in a single scheme, relationships studied and adjusted to one another. Included are the relationships of residential areas to schools and parks, to shopping and commercial centers; the relationships of the streets, and public transportation using them, to all areas requiring services.

What is placed upon the land, as new construction proceeds, as old sites are cleared and new buildings are erected, requires planning of facilities underneath the land. There must be places underground and rights-of-way for water pipes and sewers, electric power and telephone cables. These must be planned along with the public and private buildings and the necessary quantities and types of houses and apartments—a private job largely.

The ablest planning commissions and their technical staffs are well equipped to deal with the problems of metropolitan planning. But what they can do and what they succeed in doing depends upon the degree of understanding and support they receive from the public as a whole. To obtain this public support a job must be done, one that requires close cooperation on the one hand of the technical planners and elective officials in municipal government, and on the other, cooperation of these and citizen groups. Citizen participation in planning is a new popular slogan we hear on every side today. Its basis is in these suggested relationships of laymen and technicians—citizens and the public authorities.

Before discussing more fully the important question of citizen participation I would like to take up in some detail the five "dangers" or

"mined areas." This should throw some additional light upon the subject of metropolitan planning.

What Steps May Be Taken to Avoid Building More Slums and Blighted Areas? We have mentioned the master plan—its fundamental importance is assumed. A well-presented and interesting pamphlet, *Dallas—Today and Tomorrow*, presents in a clear, popular manner many of the principles which apply to the solution of this problem. Examples which are given to illustrate these principles are grouping of schools, provision of shopping centers, park and recreation areas, new neighborhood units and remodeling of old sections. These are discussed as features of a planning program which, through the years, are the basis for building a new and modern city, a community which is guided in the process by the standards of density incorporated in the zoning ordinance, likewise by the framework of well-designed modern expressways, and the local streets to serve residential neighborhoods safely and economically. These are the principles many of us believe will protect and stabilize, make convenient and comfortable the communities of the present and future. The older portions of the city, suitable for residential use as they become completely out-dated and obsolete, can be rebuilt on new ground plans; likewise, varying the character and quality of development to serve different groups, the new portions of the city, served by expressways and modern transportation facilities of all types, will be formed and influenced throughout by the principles and standards of a metropolitan Master Plan.

The Overbuilding and Underbuilding Problem. This problem is not so directly related to the master plan but in many cities it is being given increasing attention by the official planning agency. With our highly migratory population it is now increasingly recognized that the *inventory* of residential accommodations of the entire metropolitan area is in effect a single large *pool* of dwellings. These dwelling units vary widely, of course, in purchase prices and in rentals charged, permitting that portion of the population that finds it necessary to move about as income levels change and as jobs change to find a new location at a cost that suits the family's situation. Many home owners or renters need or want to make a change: to be nearer the job, because the family is larger or small, because prosperity on the one hand or proverty on the other dictates a change.

In times past we have built far more housing in our cities than there existed effective demand for in the middle and high-income groups. It was difficult to build, as we were able to do to a much greater extent than in the case of housing, for the mass consumer market in autos, radios, and refrigerators. We are still struggling to find the answer to this problem. One thing which would help matters much is better overall market knowledge, a more complete set of facts based on local study of what we have in our inventory, how far it goes in meeting the need,

what is required additionally now and for a period ahead to supply the housing market with the numbers, types, rental and sale units the factual information obtained indicates.

Some of our planning commissions are preparing such studies. In many cities the Chamber of Commerce, the real estate people, the local housing authority have investigated. Few cities, however, have put all the needed facts together in one place and made them ready and accessible to the local people who could make immediate, practical use of them.

It is clear that such information is of the greatest importance to those charged with preparing the community's master plan. The numbers of present and estimated future population, land needs for building, community facilities and public service requirements related to private developments—factual data on all these are fundamental in the city planning program. The municipal authorities cannot plan in a vacuum. They must know how many people to plan for; how many of the total number are going to the suburbs to live and to enter upon commercial or industrial enterprises in the new areas to be opened up. All the cities, the large and the small ones in a single metropolitan area, have to know something of each other's development plans and development programs if a sound, stable metropolitan community is to result.

The Problem of Decentralization. This relates to the broad problem of metropolitan planning but the focus and emphasis in discussions today is apt to be on the central business district. While the owners and managers of business properties are affected most seriously by decentralization, the municipal authorities are likewise concerned. Both have ample evidence and cause for worry. As a result of the complex and *multiple* character of the problem a *combined operations* or joint approach, after considerable study and several years of discussion, there has now been obtained wide agreement, is the proper approach.

In the last few years urban redevelopment laws have been passed in more than 20 States. To state the matter in general terms these give the public authorities in the cities of these States power to condemn land and buildings, in areas ripe for rebuilding. In this way large tracts can be effectively assembled in one ownership for the first time, and development may proceed in accordance with unified plans for an entire area. Most of these laws require all rebuilding to conform to the city's master plan; also an up-to-date development plan for the area, closely geared to the overall plan, is a requirement. The city may sell or lease these areas, or appropriate subdivisions of them, for redevelopment by private enterprise. Local housing authorities also may take advantage of these laws in most States having them.

This is one new approach and proposed method of combatting decentralization.

So far urban redevelopment is admittedly untried and largely a

theory. The theory however is advocated and supported by the real estate, housing, city planning, municipal, state, and Federal officials and other influential, representative groups, private and governmental, who have jointly worked the method out and have sponsored the laws. A Federal Bill, S. 1592, introduced by Senators Wagner, Ellender, and Taft, is the Federal counterpart of these new state laws mentioned. A full discussion of this type of legislation here however would take us too far afield. While new laws for urban redevelopment are far from perfect, the principle they represent is sound. It will take time to make them work and find out wherein they are faulty and need amendment. They offer much, it seems to those of us who favor them, in a method for systematically reviving the outdated and blighted areas so extensive and so difficult to deal with in cities. Conditions in these areas sent many good people, many industries and commercial establishments, outside the central areas seeking more satisfactory locations and surroundings.

We should take a moment here to discuss one other knotty problem of the central business district which meshes in with decentralization—the parking problem. The parking problem has an important bearing upon the matter we are discussing, even though there is no single answer to parking, just as there is no single answer to decentralization.

We have got to make more room for automobiles in central business districts or we have to use cars less. At the least we must spread the cars to be parked in central sections more efficiently around in that part of the city, so that they don't destroy the very purpose for which central business districts exist. This function is to provide the convenience and efficiency of centralization of all types of trade and services traditionally found in the business area.

Land is expensive in these sections because intensively used. Likewise the public land adjacent to properties—the street—is high-cost land, and street improvements likewise are expensive. Studies made in one city (probably not the highest or lowest cost example) showed an expenditure of $2,000 for each curb parking space provided on the street. This is three or four times the cost of the most expensive type of parking facility—the parking garage—which the bulk of the people who use the business district can't afford of course. A limited number only can pay for the convenience.

Streets, particularly downtown, where a street widening runs very high in condemnation costs (such as in the case mentioned), are for *moving* cars not for *parking* them. For fifteen years Chicago has banned all curb or street parking in the Loop business district during the entire business day. The move at first resisted, any suggestion to return to curb parking in the central business area now meets with a storm of protest.

It is relatively easy to grasp how serious this problem has become whenever there is a discussion of people grappling with the problem. In

such a discussion of a group yesterday General U. S. Grant, 3rd, said—these are round numbers—250,000 cars travel to Washington's downtown district daily, where there are 25,000 parking spaces available.

One further word on parking. The master plan, which attempts among other things to relate the highways and the city's traffic flow streams to the needs of the various sections of the metropolitan community, and to bring balance into relationships of street capacity and areas served by the channels of circulation—this master plan is a factor of major importance in alleviating the parking problem, as it is also in the problem of decentralization.

Relationship of Work-Place and Home-Place. Regarding relations of work-place and home-place I think you will be interested, in passing, to know that England, after studying its record of building 4,000,000 houses between World War I and World War II, and before commencing its postwar reconstruction in earnest, discovered two major flaws in this achievement: The British failed to relate properly places-of-work and places-of-residence; also, they overlooked on a large scale the provision of adequate community facilities. In other words they put the *housing cart* in front of the *planning horse.* We have made much the same mistake in our country. Without much more and much better planning we may repeat this mistake, to the cost of the communities and many citizens who reside in them.

One of the largest of our metropolitan places found that the workers who concentrate in each of the city's three largest industrial concentrations, for the most part lived at a considerable distance from the industry which employs them. Workers, it was found, often lived close to an industry of identical type to the employing one at the other end of the city from their work place. In this particular city travelling more or less in a straight line, either in a private automobile or in a public carrier, is not possible in the majority of cases. The route that must be followed usually requires a run down close to the center of the town, or through town, then over; or possibly outside the city, then way across the suburbs through the sparsely settled districts. This study of the problem was made in the middle '30s. It resulted in some changes in the master plan of highways, transit, and transportation. Some of the workers, too, have found another house nearer their work.

Provision of Adequate Community Facilities. The provision of adequate community facilities is of course a problem that vitally concerns the city planning agency. The importance of this problem was brought to the public attention in the early stages of the war. These same community facilities, during the critical phases of the war held up the war production program, increased absenteeism, made recruiting of war workers difficult in communities where they had been omitted or inadequately provided. The Federal Works Agency under the Lanham Act powers, was given the responsibility to supply urgently needed

schools, hospitals, water and sewers, recreation, shopping, and other facilities. The houses were then quickly filled, the plants got their workers and production moved ahead. Now the communities themselves again have this problem. The master plan is the basic instrument to show where the facilities should be located, after study of the needs of the neighborhoods and other major districts of the city. As the building of the city proceeds, as redevelopment gets under way, community facilities should accompany them. This applies, of course, to emergency construction as well as to the permanent long-range activity which is the bedrock of the metropolitan community as it grows to real stature. It is this permanent construction and development that provides high quality environment for all the community's citizens, its skilled and unskilled workers, clerical or white collar people, executives, officials, professional groups alike. The varied skills and abilities, tastes and preference of these citizens, in every city, together contribute the principal product of our communities—the American way and the American standard.

Municipal governments are a team of administrators, professional and technical people with their assistants and staff members of many kinds. Certainly it is accurate to say this of a city of any size. It is appropriate to call attention to the fact that the whole municipal team is needed to supply properly the numerous and important service jobs expected of a modern city.

If it is true, as has been claimed, that the best, most effective and lasting city planning is that which has the broadest popular basis, then the amount of time, money, and energy devoted by officials and planners to the city planning program to date, which has produced such excellent results in this and some other cities, ought to be expanded. This view is based on the assumption that citizens are powerless to advance the cause of planning very far without research, the diagnosis, and the recommendations made on a basis of the often highly technical work of trained city planners.

My point is this: we need to support planning in our communities even more substantially than we have in the past. Citizen understanding and citizen support grow and strengthen on the foundations laid by the city planning commission and its staff, necessarily supported by a tremendous amount of understanding and effective assistance in city hall. This needs to come all the way from the Mayor's office on down through his official family. Official support is absolutely necessary. City planning is a matter of community-wide concern and the city government is the principal local institution that exists to serve all the citizens. Citizen support, of course, one way or another, influences all official action for or against planning. In most cities additional support is needed so that the planning program of the city may be carried even farther.

As most of you know, citizens in Boston and a newspaper in Chicago have conducted contests in those cities, with large cash prizes awarded

to the winners, to try to find some of the answers of the metropolitan planning problem. The *Toledo Blade* has spent a quarter of a million dollars for a scale model 60 feet long to interest the citizens in the planning of Toledo, Ohio. Philadelphia is preparing for public showing next year a large exhibit at a tremendous cost, also privately financed, to tell the planning story and to arouse the community to its necessity and its value. Philadelphia's exhibit will draw its popular materials from the basic technical studies of its official city planning staff, at work now for about two years on the master plan.

Industries spend considerable sums on product and market research. When they begin production they have already managed to see their *targets* clearly. Having focused them in their *sights* they are able to move toward them with every probability of success.

On additional and more intensive studies of the central business district parking problem, for example, basing such researches upon the master plan, thousands of dollars may be profitably spent, if necessary, where many millions in investments, private and public, are at stake.

In addition to necessary technical planning studies our cities need to give added attention to use of the now highly developed techniques of the best of advertising and public relations specialists. Their skills are needed to help make clear as crystal what the problem is, what the recommended solutions are, so the people may all see what is proposed, how it affects their city, how it affects them—and if the game is worth the candle, as we mostly believe.

Let the citizens of the new and old suburban communities of the metropolitan area see these clear, popular presentations of the details as well as the general city plan proposals. Seeing something very concrete and specific will permit objections to be intelligently and reasonably discussed, differences negotiated or compromise reached and knotty problems cleared away. Perhaps there is no real threat, after all, to high standards existing in many suburban communities. Low standards at a distance may be a greater threat as these sometimes come closer to home, as in the case of the well-known creeping blight so prevalent in our cities today.

Finally, *community action for community ends* is everyone's business. The people of our American communities, and in other lands, are beginning to be more certain that it pays dividends, not only in better cities, but in better citizens.

Metropolitan Plans in the Suburban Region of Chicago

ROBERT KINGERY, General Manager, Chicago Regional Planning Association

PUT yourself in the position of an officer of a newly formed Regional Planning Association in a great metropolitan center.

It is your responsibility to chart the course of action, as one of the members of a large board of directors. The Board includes some public officials and some "civilians." The area of operation lies partly in three States, includes 15 counties, 250 municipalities, 240 townships, nearly 8000 square miles of land and about 4,000,000 people.

There appear to be two principal choices. One is to employ a master planner, give him a staff, and have them survey the geography, soil, population, uses of land, industrial trends, street and highway traffic, railroads, water courses, aviation, supplies of water, sewerage, parks, school systems and all the other elements of the region including "social and economic trends." The staff then would prepare a master plan and present it for adoption by the many official bodies. And during the intervening period of preparation say several years, much is being done right or wrong, with or without "Plan," in every portion of the area.

Another choice is to recognize and utilize the talent, public and private, in every segment of the region, pool their individual plans, many of which would go forward in any event, encourage them to make and carry them out in harmony with each other and with eyes focused high to the future. Part of this choice would include concurrent studies of basic facts, needed by all the local authorities and interests, upon which to build their respective plans, and a critical angle of this choice would be that both the public official and the "civilian" would be having an important part in preparing plans which are more likely to be executed, simply because the development under his jurisdiction is sure to follow the plans which he prepared by agreement with others.

The directors of the Chicago Regional Planning Association very early chose the latter method of operation. Furthermore, they agreed with the Chicago Plan Commission, an official department of the City, that the regional planning field would be wholly outside the City of Chicago, in the 50 to 60 mile wide belt of suburban area, but with plans for all items merging and harmonizing at Chicago's limits. Thus, no duplication! And in addition, they promptly determined not to build a large staff to do work properly within the scope of existing municipal, county, state and other public agencies. Instead they planned a small organization, with modest budget, to serve those public officials by aiding them in research, setting of high objectives and coordination of plans and policies.

Heresy, you may say, but here in brief, is how it has worked in a few of the many units:

Highway and Street Plans. In 1925 when our activities were launched, each of the three State Highway Departments and each of the fifteen Counties had its own official highway system. In not every instance did the system of one fit with that of another at the state or county lines. In some cases the official plans needed expansion. When these plans were all entered on a composite map, prepared by the Association's staff, it was entirely unnecessary for the staff to press for adjustments. These State and County agencies, exceedingly competent men, aided by Federal highway authorities, did their own collaborating and subject to later revisions and additions, developed an integrated, comprehensive highway program. It was assured of execution because those who made it were in a position to execute it.

Carrying the process farther, the municipal engineers for each segment of the Region were brought together frequently to fit their street systems into the County and State plans, with the result that over the years there has grown a solid confidence among those officials in each other, in their joint plan, in its progressive execution and continuing betterment.

It was these same highway and municipal engineers who raised the standards of street and highway right-of-way widths for the complete system of "super-", "major-", "through-", "minor-", and "residential" streets. Having set up their respective systems they met with real estate men, surveyors, zoning authorities, platting officers and helped to develop a code of subdivision and platting practice which would protect the projected highway and street systems as the land was subdivided.

Research in traffic surveys, pavement widths and capacities, underground utility locations, landscape treatment of highways, of subdivision practices and many other details were developed by the Regional Plan staff, as requested by these cooperating agencies.

Use of Land, Regulated by Zoning. Only thirty municipalities, and no counties, had adopted zoning regulations, when the Regional Plan was launched. Zoning practice was new, had not been tested in the Courts. The relationships between land areas utilized by industry, business, and residences were not clearly defined, and the needs of a given population for given amounts of land for each use were relatively unknown.

Members of Zoning Boards of Appeal, some unfamiliar with their power or duties, zoning enforcing officers, municipal attorneys and others were brought together frequently to exchange experiences as to drafting, administration and practices. From time to time they, too, asked for research. They sought the compilation of a table or chart which would summarize the principal regulations in the several communities. They participated in measuring the amount of ground floor frontage of busi-

ness establishments actually in use. They asked for, and for years have been receiving from the staff, summaries of important court decisions on zoning questions. These items of a research nature were developed with the aid of the officials themselves and of graduate students at Northwestern University and the University of Chicago under the guidance of competent faculty members.

Now, in 1946 more than 130 municipalities have adopted zoning ordinances. By large majority they are being pretty well administered. And in addition five counties have adopted, and two more are preparing, rural zoning regulations.

Zoning authorities have had a considerable influence upon the highway programming and the other way round as well, and they have joined with the subdivision authorities and with the subdividers in constantly improving practices and plans in almost every part of the Region of Chicago.

Parks, Forests and Recreation Areas. Following the same practice of bringing together the local authorities, the municipal park and playground people, the County forest preserve and park officials and the state park staffs have consolidated their efforts, have devised desirable objectives for the Region as a whole and for their particular segments, of which they are in responsible charge.

Starting with 30,000 acres of state and county park and forest holdings in 1925, they proposed an objective of approximately 65,000 acres to serve a population of a little more than 6,000,000. As of 1946 they now have 51,000 acres in public possession all in accord with the general plan.

In 1925 the suburban municipalities owned a combined total of 4,200 acres of park and playground land. Measured against the population that area equaled less than 4 acres for each 1000 people. Current totals for 130 municipalities are above 11,500 acres, at the ratio of 7.8 acres for each 1000 people living in those communities.

These park officials, too, asked the Regional Plan staff for certain items of research. They wanted to know, for example, how much it cost to maintain and operate a park system once it was established. They participated in furnishing on a single letterhead-sized sheet (not a questionnaire) some few pertinent cost records of their own. Tabulated, this body of figures developed into a valuable reference document, and the especially significant item which was disclosed was that those communities which approached or achieved a desirable objective of 10 acres of park and playground property for each 1000 population were operating their systems for about one-sixth the cost in dollars per acre per year that was paid by those which had 2 acres or less per 1000 persons. Specifically, a continuous six-year cost record of the same nineteen communities, indicated that:

4	communities,	with	under 2	acres	per	1000,	pd.	$602	per	acre	per	yr.	
6	"	"	2 to 5	"	"	"	"	346	"	"	"	"	
4	"	"	5 " 10	"	"	"	"	207	"	"	"	"	
5	"	"	over 10	"	"	"	"	107	"	"	"	"	
19	"	Averaging 8.8		"	"	"	"	$158	"	"	"	"	

I mention this item, perhaps in too great detail, but to suggest the kind of research that has actual and direct bearing on local and regional plans.

Aviation Plans. It would be redundant to recount the fact that plans for an airport system of the Region have been compiled, improved, adjusted and partially carried out in the same cooperative manner by public officials, small airport operators, air line officers and others. The practices of airport zoning, spacing, minimum site areas and many other details have been pioneered in the Region of Chicago and the results are beginning to be evident. New airports are being properly spaced and located where expansion costs will not be too expensive. And some existing ports too closely spaced for safety of operation are being eliminated.

Perhaps you have noticed the fact that the Regional Plan, in the Chicago suburban area, is an Association. Its members are counties, cities, villages and towns, park districts, companies, civic-minded individuals and others. It has no power and seeks none. Any indirect power it may have, lies in the confidence of the public and the public officials in the excellence of plans developed as a result of combining and coordinating the judgment of many.

The Association does not seek publicity, has no public relations staff, and actually spends as much time keeping out of the press as it spends getting into it. Our staff pays particular attention to giving credit where such credit is due a public official who adopts a policy, administers a plan, or appropriates for a worthy unit of the plan.

Don't let me leave the impression that all is perfect in the Region of Chicago. Much, very much, has been accomplished. And much more is to be achieved. The foundation has been laid and the practice and method of operation have been established so that progress is at an ever-increasing tempo.

Experience in Allegheny County, Pa.

PARK H. MARTIN, Executive Director, Allegheny Conference on Community Development, Pittsburgh, Pa.

THE name, Pittsburgh, is known to all; Allegheny County, probably to a lesser degree.

Pittsburgh, Pennsylvania, is known the world over as the largest producer of basic steel; it is sometimes called the Steel City, sometimes the Workshop of the World. Pittsburgh proper is the center of a great and, to some extent, sprawling metropolitan area, extending beyond the confines of Allegheny County. The Pittsburgh Industrial District, according to Department of Commerce records, includes Allegheny County and the adjoining counties of Beaver, Washington, and Westmoreland. The 1940 population census for the four counties was 2,082,-556 persons. The population of Allegheny County alone, according to the 1940 census, was 1,411,539 persons. Estimates of the 1945 population indicate it to be 1,530,000. The 1940 census records show the City of Pittsburgh having a population of 671,659 persons. In addition to the central city of Pittsburgh, Allegheny County contains three third class cities and 121 boroughs and townships with a 1940 population of 739,880 persons. Allegheny County, therefore, with 125 municipal subdivisions, is probably not equaled in this respect by any other metropolitan area in our country. The very large number of separate municipal units of government is in itself a problem.

The area of the County is 747 square miles; that of Pittsburgh is 54 square miles. The County is divided into four geographic areas by the Allegheny, Monongahela, Ohio, and Youghiogheny Rivers. The Ohio River is formed by the junction of the Allegheny and Monongahela Rivers at what is called the "Point" in downtown Pittsburgh; the Youghiogheny River being a large tributary of the Monongahela River. The topography of the County ranges from rather deep valleys at the rivers into rolling table land several miles back from the rivers. The topography has exerted a great influence on the development of the area in the matter of transportation, both rail and river, highways, street patterns, and community development. Because of the rolling character of the terrain, many communities may drain into six or eight different watersheds, which watersheds may drain into as many different municipalities.

The limits of time require that we confine ourselves mainly to the larger picture of the County government. For over thirty years, cities of the second class in Pennsylvania (Pittsburgh) have had the power to establish planning commissions and to zone. Third class cities, boroughs, and first and second class townships more recently have been permitted to establish planning commissions and to zone. About ten years ago the power to pass *county* zoning legislation in first and second class

townships was granted to counties of the second class (Allegheny). Long previous to that (1923) counties of the second class were permitted to establish county planning commissions. Allegheny County availed itself of that power immediately and in 1923 established the Allegheny County Planning Commission. The Board of County Commissioners, however, as yet has not exercised its prerogative in zoning in first and second class townships. However, the 1945 State Legislature passed enabling legislation permitting counties of the second class to zone around county-owned airports. Recognizing the large investment of County funds in the two County-owned airports and the need to protect the airways around them, the County Planning Commission is now engaged in preparing such zoning legislation.

The need for an over-all, county-wide study of land use and zoning is becoming more apparent, and we hope to see steps taken on this problem in the not too far distant future. One hundred twenty-five separate approaches to this problem not only are unadvisable but tend to prohibit any orderly development.

In the field of land subdivisions, the County Planning Commission has full authority in the approval of lot subdivisions in townships of both classes. That is to say, no plan of subdivision may be recorded in the County Recorder's office without the approval of the County Planning Commission. In the cities and boroughs, however, the County Planning Commission's power is limited only to that of review of plans offered for recording. This restriction of authority is a weakness, relieved to some extent by the fact that practically all cities and boroughs are already laid out and developed, the areas in which development is taking place being in the townships where the County Planning Commission is the final authority.

Public Works. The Act permitting the establishing of a county planning commission provides that the commission shall have power "to study and make recommendations on the laying-out of highways, bridges, tunnels, parks and parkways, the location and ornamentation of public buildings" and further provides that "plans for such public improvements shall be submitted to the County Planning Commission for its approval or disapproval twenty days before their adoption by the Board of County Commissioners." I can say that within the entire twenty-three years of life of the Allegheny County Planning Commission, successive Boards of County Commissioners have followed that practice.

In 1936 the County Planning Commission took an action that probably did more to establish the Commission as an effective arm of the County government in the minds of the people of the County, as well as with the Board of County Commissioners, than any other action it has taken. This was to propose a long-range program of public improvements and a method of financing.

Prior to 1924 there had never been a Peoples Bond Issue in Allegheny County. In that year, the then Board of County Commissioners proposed a $28,000,000 Peoples Bond Issue for public works. The issue was approved, and the entire proceeds were spent or pledged by 1928. In 1928 a second Peoples Bond Issue for public works was proposed by the Board of County Commissioners and approved by the people in the sum of $42,000,000. This sum was practically all spent by 1932. Then came the depression. The spending of $70,000,000 in eight years did not leave the County in the best position to meet the emergency caused by the depression.

In 1936, in analyzing the future needs for County public improvements, the County Planning Commission presented a program of needed, worthwhile improvements totaling $72,000,000 which, in the opinion of the Commission, would be required over a period of time fixed at fourteen years.

The Commission recommended that projects be budgeted on the basis of need, rather than as a result of pressure groups, and that not over $5,000,000 be expended in any one year. This would establish a level line of expenditures over a fourteen-year period in contrast to the previous practice of excessive expenditures in a few years with corresponding lack of expenditure in following years. The Pennsylvania Economy League, a private agency engaged in the study of municipal finance in the State, found, after a study of Allegheny County finances, that by limiting the expenditures to a maximum of $5,000,000 per year, the total debt of the County could gradually be reduced and that there would be no tax increase needed for debt purposes.

This could be accomplished because on the basis of bond maturities of previously incurred debt, the County was retiring annually seven to eight million dollars of bond obligations. Thus, if $7,000,000 were retired and $5,000,000 of new bonds issued, there would be a net reduction of $2,000,000 per year. In other words, the previous debt incurred became a sort of revolving fund.

The program and policy proposed by the Planning Commission was adopted by the Board of County Commissioners and, in the years 1937–1941 inclusive, the County spent $28,000,000 on capital improvements, $3,000,000 of which were P.W.A. grants. Since 1941, because of the war, the improvements program has been stopped.

The $25,000,000 spent by the County from 1937 to 1941 inclusive was raised by the sale of bonds on the vote of the Commissioners rather than by the vote of the people. However, the people thoroughly understand the program as it has been well publicized through the public press. The fact that the Board of County Commissioners which adopted the program and financial policy in 1936 has been returned to office twice since its adoption is proof of public support of the policy. Now that the war is over, the Commissioners are planning to resume the

program. Next month, May 21, they are submitting to a vote of the people, for their approval or disapproval, a bond issue for $33,000,000 with the commitment that not more than $6,000,000 will be spent in any one year. This can be done without increasing the total County debt and without increasing taxes for debt purposes. The total borrowing power of the County today is $90,000,000. The reason the Commissioners are now submitting the bond issue to the people rather than continuing to carry on the program by issuing Commissioners Bonds is that, in the period preceding the war, the amount of new bonds issued by the Commissioners had reduced their borrowing power to an extent that it does not seem wise to reduce it further. This reduction resulted because, while the County annually retires more than the $5,000,000 of bonded debt, the amount of the bonds being retired is about evenly divided between Peoples Bonds and Commissioners Bonds, while the new bonds issued have all been Commissioners Bonds.

Technical Committee. In addition to the County program, the State of Pennsylvania is responsible for over 900 miles of highways in the County, and annually has a highway improvement program in the County. Some of both the State and the County projects are located inside the limits of the City of Pittsburgh. In many cases, all three agencies are involved in one project. In order to discuss engineering matters relating to such projects and to clear the many problems involved in planning them, there has existed in Allegheny County for the past seven years what is called the "Technical Committee on Major Improvements." This committee consists of the District Engineer of the State Department of Highways, the Director of the County Department of Works, the Director of the County Department of Planning, the Director of the Pittsburgh Department of Public Works, the Chief Engineer of the City Planning Commission, and the head of the City Bureau of Traffic Planning. This group meets regularly every month, and oftener when necessary, to discuss the projects being planned. Invited to meet with this Committee and to participate in discussion but without the right to vote are representatives of two civic planning organizations: the Pittsburgh Regional Planning Association and the Allegheny Conference on Community Development. Recently the State has committed itself to a $57,000,000 improvement program in the County; this, in addition to the proposed $33,000,000 County program, will require many meetings of the Technical Committee. Experience has shown the value of such a committee; very frank discussions are held and points at issue cleared expeditiously.

The City of Pittsburgh is not in a financial position to carry on an extended public works program. Its funds will be required for maintenance work. However, it will not lack in major improvements since a large portion of both the County and State programs will be in the form of major highway and bridge construction inside the City limits.

Metropolitan Growth, Traffic and Parking

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THIS is a most unique occasion because we learn from His Honor the Mayor and from the columns of the local press that this is a most significant day in Dallas. First we learn that we are aiding in celebrating the thirty-sixth anniversary of the establishment of planning in Dallas. In that connection I note a most surprising coincidence because at this very minute a new local ordinance becomes effective—an ordinance which completely prohibits any parking in the downtown area between the hours of 4:30 o'clock and 6:00 o'clock P.M. At the risk of being discourteous, I cannot refrain from wondering whether the necessary prohibition of parking in the heart of the city after thirty-six years of planning is evidence of inadequate planning, or whether by chance it should cause those of us who are professionally associated with the subject to pause long enough to evaluate whether or not our perspective is adequate, or whether perchance we do have difficulty in realizing that the world changes and that our task is represented by the problem of constantly amending our program to fit such changes.

Yesterday some of us who fortunately arrived early had the privilege of viewing first hand some of the marginal development in areas just beyond the corporate limits of the city. At least two separate autonomous neighboring cities were visited. Some concern was expressed by certain of our hosts over the fact that these new cities were developing outside of the corporate limits of the parent town, and that there was seemingly little inclination on the part of these new communities to submerge their interests and identities by being absorbed politically by the parent city. This phenomenon is not unique to Dallas. It is found universally in connection with all metropolitan centers throughout the Nation. It poses a variety of related questions for which, as yet, we have found no adequate answers. I mention this fact because in the opinion of many the over-all problem seems to emphasize administration rather than physical planning in the limited sense of that word. For many years it has been my belief that part of the explanation for the limited results that have flowed from planning is attributable to the fact that we, as planners, have concerned ourselves mostly with the mechanics of design and with little thought directed towards human habits and those considerations which prompt people to do the many things which they do.

The metropolitan areas have been only recently formally recognized as an important and new social unit in America. Most metropolitan areas, like a solar system, consist of a central major community, with smaller communities distributed around like satellites, and with more or less open space of unincorporated territory intervening. We have seemingly failed to recognize that these urban solar systems represent inseparably common interests. Every metropolitan area is a single entity in that the

broad social and economic, as well as physical problems are common to all of its parts. So inter-related are the interests of the multiple communities comprising a metropolitan area that it is incorrect ever to assume that a single city is a thing complete by itself. In fact, the areas enclosed within the political boundary lines of a corporate city are, almost without exception, totally arbitrary areas that have little, if any, relationship to the unity of interest in these broad social, economic and physical problems. They are separate only politically, and yet that simple fact has apparently blinded most of us to the real truth that when we resort to planning in a metropolitan area we must consider all of the parts as a single whole. It is really a problem in administration, and sooner or later will compel recourse to invention in order that we may adapt our form of popular government better to meet modern needs.

That subject relates properly to the topic assigned me, else I would not have mentioned it at such length. We discover some very interesting things happening in American cities, and although I do not know the statistical facts as they relate to Dallas, I have little doubt that the general rule applies here as elsewhere. As an evidence of some of these things which are happening I cite the case of my home city where the assessed valuation of property comprising the central business district decreased fifty percent in the single decade preceding Pearl Harbor. In fact, the same center actually shrank physically in that while it possessed an average level of four and one-half stories in 1930, that had been reduced to three and one-half stories in 1940. While these startling things were occurring, we discover that, by the accurate count of the Bureau of the Census, the population of the city whose heart had thus shrunk had increased by over a quarter million. Thus we find for the first time in history a denial of what had become an axiom, namely, that as cities increased in size the value of property comprising them increased also, but at an accelerated rate. Here we find a situation where, as the population curve goes up abruptly, the valuation curve of property tobogganned and crossed the population curve at almost right angles. I would not be warranted in mentioning this fact if it represented but an isolated case. But the phenomenon seems universal, and even here in Dallas since 4:30 o'clock this afternoon, when parking in the downtown district is no longer permitted, I cannot help observing a symptom of the same disease.

I speak of these trends as a disease. I question the correctness of that term. I am inclined, rather, to believe that it was the previous condition from which we are now descending that must be thought of as abnormal. The processes of readjustment through which our cities are passing is bringing us to a more stable and normal condition. One of the concomitants of decay in the center is found in the trend of what we commonly refer to as *decentralization*. There have been those in the past who have lamented over the phenomenon of decentralization. It is apparently

just as impossible, however, to prevent further decentralization as it is to undo that which has already occurred. In fact, water never runs uphill by itself, but water which runs downhill, if properly handled, can be put to good purpose. It seems reasonable to believe that all of these surprising modern trends are little else than effects and none of them are causes. My interest instinctively prompts me to seek the causes.

In anything as important as are these new trends in urban readjustment it would be unwise to attribute them to any single cause. But whatever the multiplicity of causes may be, there is one which stands out boldly as possessing major importance. This one dominant influence is the mass change in habits of people. These changed habits, however, are themselves results rather than causes. The real cause of changed habits and, therefore, of changing cities, is the automobile. Our urban populations have almost literally become so saturated with wheels that they are now possessed of a quality never before realized—the quality of a fluid!

Prior to the advent of the automobile, urban populations represented a semi-static mass that did not possess within itself the power of mass movement. Only through the application of energy from without, as in the form of common-carrier service, and especially rapid transit, did populations move. But now that populations have become fluid, they, like any fluid, tend to flow and find their own level. Populations of yesterday had qualities similar to a pile of sand. It could be transported from place to place, concentrated in piles and wherever it was put there it stayed. But the fluid populations of today cannot be piled or caused to remain in one place by common means. Therefore, as we observe these radical changes occurring in cities and note the efforts that are being expended in attempting to re-establish the *good old days* we become impressed with the futility of such effort so long as the principal factors have changed as radically as they have.

Before reaching the particular point I have in mind to make, let me refer to another phase of the problem, namely traffic. There is probably no modern city not confronted with a serious traffic problem. But apparently there are few which have endeavored to analyze the problem by reducing it to its least common denominators. We have all of us seen the efforts of the past in which the technique involved was customarily that of making statistical studies by counting the volume of traffic at given points at given times and, upon discovering spots of abnormal congestion, we jumped to the conclusion that the solution to the problem at that point was to increase the capacity for traffic by either widening the existing street at the spot, or providing an auxiliary street or two. Apparently none of us has ever stopped to question whether or not it might be possible that the congestion at the point was caused, not by people who *desired* to be there, but by those who were *forced* to be there in order to get to some other place. When that concept of the problem was fully

understood we entered the era of by-passing. But seemingly we were ignorant of the fact that in traffic, as in other matters, "an ounce of prevention is worth a pound of cure."

A vehicle which never starts upon a journey never contributes to traffic congestion. Is it too much to expect, therefore, that planners shall be realistic and reduce problems to their simplest elements? If this be not an unreasonable question, then is not a potent attack upon the traffic problem to be found in preventing traffic by eliminating the need for it? Does not the much discussed phenomenon of decentralization represent a basic attack upon traffic by minimizing the need for everybody at all times to go to a single center? Time on this occasion permits no more than raising this question, although the subject is susceptible of most exhaustive treatment.

I come now to the subject towards which all that I have said is intended to point. To many parking represents a new subject. In a sense it is, but basically it is but a new form of an old subject, and that subject is physics. Parking is but a phase of the traffic problem, notwithstanding the fact that many people have difficulty in recognizing the stationary car as an element in traffic. Crudely and briefly let me point out the component parts of all that is necessary for urban populations actually to flow like a fluid. After the automobile had become an accepted fact, the individual who acquired his own vehicle assumed that he had thus become independent in the matter of movement. However, nothing could have been further from the truth. The mere possession of a self-propelled vehicle was a futile thing unless the vehicle had a right-of-way upon which it could operate. But, to be utilized to maximum capacity, a vehicle needed not one right-of-way, but a multitude of rights-of-way. The very magnitude of the problem of providing rights-of-way was such that even the wealthiest individual had no hope whatever of providing his own system of roadways. Therefore we adopted the only remaining expedient which was to provide commonly rights-of-way through government. Thus we have come into possession of a network of our streets, roads and highways. The unimaginable magnitude of our thoroughfare system can be graphically realized if one but pauses long enough to appreciate the fact that the road in front of his property connects unbrokenly with every residence, business, factory and farm in the Nation.

For a long while we believed contentedly that with a vehicle which we provided privately, and the rights-of-way which we provided publicly, we had a complete system of independent personal transportation which, in the aggregate, produced the fluid population. Then suddenly we came to realize that this was not true, because a privately-owned automobile operating upon a publicly-owned system of roadways operates futilely unless at its destination there is a space upon which to stop. At the outset the only space available for purposes of stopping was a narrow lane

at the edge of the roadways which, in cities, we call the curb. This is where the subject of physics enters. The simple fact is that the capacity at the curb is woefully inadequate to accommodate the number of vehicles involved in causing population to flow to Meccas called business districts. No splashing of the colors of paint on curbs, nor even the installation of mechanical contrivances called parking meters, can nullify the simple law of physics which states that a given area can accommodate no more than a given volume.

I appreciate fully that there are related questions which time does not permit discussing. However, to give comparable emphasis to the points in the composite problem I merely conclude that we are faced with the problem of off-street parking. We know considerable about so-called off-street parking. We know that there are different types of needs. We know what constitutes proper relationship in the location of parking areas to business sites to be served. We know the tolerance of people in terms of their willingness to walk at the end of their ride. We know somewhat of the art of design in order to assure maximum ease of ingress and egress and to encourage maximum turn-over, thus increasing capacity without abnormally involving the use of land. We know many things with reference to parking, some from experience, more from reasoning, but very little has yet been done to cope adequately with the problem.

The remaining single reference I make to the question of parking raises the matter of policy as to whose responsibility it may be to assure that parking facilities shall be adequately provided. Is it a public responsibility of government? Is it the responsibility of individual business enterprises, or is it the responsibility of individual persons? I find an answer that satisfies me completely. I have already given it, although you may not have recognized it. I have pointed out that the individual can and does provide his vehicle, but that when it comes to the need for roadways the circumstances are such that of necessity they are provided publicly. In the same manner the number of possible destinations on trips by automobiles is infinite. Therefore, the magnitude of the problem is commensurate with the magnitude of the roadway problem, and we can arrive at no other conclusion than that the responsibility for assuring that these terminal facilities shall be made available in adequate form is a public responsibility. It does not necessarily follow that this responsibility shall extend to the actual physical providing of the facilities, but it does involve the responsibility of government in seeing to it that in all new development, and in inevitable redevelopment, the same attention and compulsion shall be directed towards off-street parking facilities as in the past has been directed towards streets and roads.

Combining now all of the subjects I have mentioned, I rather assume that you have about arrived at the conclusions I have long since reached, namely, that when a community is confronted with the problem the roots

of which are imbedded deeply in the laws of physics or other natural laws, and when a difficulty is found to originate in physical inadequacies, then the solution is never to be found through the expedient of a legislative act. If the problem is physical, the solution must be physical.

The mere fact that cities and city centers have, in the past, attained to huge dimensions is no reason to believe that they will continue to do so. In fact, what with decentralization so rampant, and business-center decay so universal, one would indeed be a human ostrich with his head in the sands of the past to deny that probably a new order is in the making.

Personally I find another explanation of why cities are breaking up into lesser cells. Again the laws of physics present themselves. The illustration I have often used and which it has been suggested I use again today is one that reveals a phase of physics known as the laws of mechanics. This law teaches us that when dealing with a mechanical contrivance there is an ideal size. To remain below that size or to exceed it, in either case, introduces the law of diminishing return.

My illustration is the typewriter. There have been huge models constructed that were useless except for advertising purposes. In the other direction there are miniature machines constructed and they are called portables. They sacrifice much for the convenience of portability. In between is the standard model which has become that through years of trial and error, as well as through the application of scientific design. Here I pause just long enough to observe that a business district functions much in the nature of a machine, and therefore is subject in large degree to the laws of mechanics. Now, returning to the question of the typewriter, if a business house, originally served adequately by the output of one standard typewriter, finds need because of business growth to increase the output of typed material it is never the practice to exchange the standard model typewriter for one twice as large. Instead, it is the universal practice to buy a second standard model, and then a third, and so on as the need increases. With this simple truth in mind I can come to no conclusion other than that in the city, as in the case of a typewriter, when a business district has reached its maximum size in terms of efficiency and economy of operation if the community which it serves has need for more service, the practical thing to do is to provide *another typewriter*. The phenomenon of decentralization and the decay of erstwhile supersized business districts is graphic evidence that in the face of independence on the part of people in the matter of movement, the very physical structure of our cities is reacting to these inexorable natural laws. The real problem of the planner is not to resist these trends and attempt to make progress recoil upon itself, but it is rather our obligation and our privilege to become familiar with the manner in which these laws are exerting themselves upon our puny man-made institutions, and then adapt our own programs to the realities.

A Statement of the Parking Problem

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Introduction. What is commonly referred to as the "Parking Problem" is today a nationwide city transportation affliction. No community has solved it completely. Particularly in cities is it acute, and will become increasingly worse.

Many keen students have thought deeply on the subject. A growing literature has been developed through research organizations. Numerous committees have made studies and have published their findings. The writer has had the benefit of all of these efforts in addition to his own experience in the analysis of the problem.

The opinions expressed in this paper are entirely those of the author.

Purpose of This Paper. This paper proposes (1) to state the problem as clearly as possible; (2) to present and appraise proposed solutions; and (3) to single out what appears to the writer to be a highly effective universal attack.

Definition of the Problem. In most metropolitan and city areas and their suburbs, substantial portions of the residents use their autos to travel to the central business district to work, to do business, and to visit places of amusement, recreation and culture. More people have this urge than can be accommodated by parking spaces at curbs and in parking lots and garages within easy walking distance of major destinations upon which the populace converges daily. Also, the cities' trucks and buses use substantial curb space.

The economics of the situation is such that there is a constantly increasing deficiency in the supply of terminal parking facilities at desirable locations, acceptable to the public in the face of an expanding public demand.

This constitutes the City Parking Problem.

Curb Spaces—Supply and Demand. Curb spaces, particularly those nearest ultimate destinations, are the most convenient of available parking facilities. Yet in most cities these highly desirable choice parking spaces are free. Naturally, the woefully inadequate supply of curb spaces can not meet the continually expanding and insatiable parking demand. Consequently, several methods are used to balance a decreasing supply against an increasing demand for curb parking spaces.

Parking Restrictions at Curbs. The most widely used method of balancing supply and demand is to restrict curb space to short-time use. This allows maximum turn-over of curb space. However, available spaces are so few in relation to demand, the walk-to-and-from destination usually so long and the remaining legal parking time so short that

overstaying past the legal time limit has become the rule rather than the exception. Increasingly motorists make overstaying a habit. Bold motorists brave parking fines, as cheap forms of parking fees.

Double parking has often induced rigid enforcement of auto parking bans. Then, in place of the parked autos, trucks flow in to occupy the liberated curb space. Auto parkers are forced to side streets and to the few convenient parking lots and garages which become monopolies. Their operators either raise their parking fees openly or through a "black market" somehow receive higher fees. Public resentment against exorbitant parking fees usually follows, in response to which, enforcement is relaxed. The cycle is completed.

In the face of a strong public demand for convenient curb space, the police are ever in the impossible position of trying to enforce unenforceable curb parking bans.

Parking at Fringes of Business District. Another method often proposed to regulate supply and demand of curb space is to try to "educate" the motorist to park his car at the fringes of the business district (where land is cheaper and parking rates are correspondingly low) and have him use mass transportation into the heart of the business area. One has only to try this method for himself, parking his car, emerging in a rain, perhaps, and then boarding a crowded bus or street car, lucky to find a strap to hang on. The difference between the auto ride and bus or subway ride is, to put it mildly, an anticlimax—more accurately, a terrific comedown. This method of reducing auto parking demand in the central business district obviously disregards human nature, if it banks on producing thereby a sizeable dent in the city parking problem.

Parking Meters at Curbs. Some 430 of our cities have bowed to the inevitable—have called into service the economic price system to help balance a limited supply of curb space against an excessive demand. They have installed parking meters. These city authorities report some interesting discoveries about parking meters: they simplify and reduce police enforcement; they are acceptable to both motorists and business men; and they produce surpluses significant enough to contribute to the cost of other improvements in city traffic facilities. So long as such surpluses are used for further traffic improvements, the public will continue to accept meters. When such surpluses begin to be diverted to other city uses, the motoring public may resent it and rebel.

In any event, curb spaces alone can usually meet only a fraction of the parking demand at best. Parking meters may help keep parking demand and the limited curb space in some sort of balance, but only if ample and publicly acceptable offstreet parking space in the central business district can meet the continuously expanding over-all parking needs.

Characteristics of Parking Demand. Students of parking are in general agreement on a few demand characteristics. Motorists insist on convenient parking within an easy walking distance of their ultimate des-

tination. Most short-time parkers will walk 500 feet or less and will not walk more than 1500 feet from parking point to ultimate destination. Most motorists will not wait more than 5 minutes for cars to be delivered to them. Motorists are willing to pay a reasonable parking fee.

To meet these demand characteristics, offstreet parking terminals must be evenly diffused throughout the central business district, preferably in small units within easy access to and from arterial routes, and each terminal must be convenient to ultimate destinations.

Economics of Parking Lots. In attempting to provide an adequate and publicly acceptable supply of offstreet parking lots in the central business district, the big stumbling block is the exceedingly high values of city real estate. Locations where masses of people desire to go, where motorists wish to park, are the very places where land values are high. This will always be so, for people en masse make realty values.

Parking lot locations where land is not as expensive are usually too far away from major areas of ultimate destination. People bound for those destinations will, therefore, not use them. Only those within easy reach of destinations in the vicinity of these lots make use of them and then only to a limited extent.

Locations in the heart of the city being invariably on land of high values, cannot be operated profitably. A rate that will cover operating and all fixed charges will not attract enough parkers to fill the lot. Conversely, one that will fill the parking lot will not cover all charges. For these reasons, parking lots are available only so long as owners are willing to accept part of normal interest on investment in the land. As soon as some other land use develops that will offer a greater financial return to the landowner, the lot goes out of circulation as a parking lot at the very time when its need becomes greater than before.

In growing cities parking vehicles is not a profitable land use. It is futile, therefore, to expect the parking lot enterprise ever to solve *completely* the city parking problem.

Economics of Parking Garages. Multistory garages do offer a means, not only of adding to the aggregate offstreet parking space, but at the same time offer a method of spreading the high land values of lots among the upper stories. For example, a $30-per-square-foot lot to which has been added 4 stories of a $5-per-square-foot building has been converted to a $12.50-per-square-foot garage (i.e., $7.50 per square foot for the land and $5 for the building). This process of reducing unit footage costs, however, reaches its limitations rapidly above 4 or 5 stories. Every additional story becomes less economical for several reasons. The over-all unit gross footage cost increases with each story; gross footages required per car space also increase with height; it takes longer to unpark cars from upper stories; the margins of street capacities surrounding the garage are rapidly absorbed by the vehicles disgorged from the garage and thus further delay unparking and the get-away from the garage

block. In short, as garage heights increase, operating costs rise; hence parking fees must rise. Reductions in unit footage costs are usually not sufficient to warrant going higher than 4 or 5 stories.

Low-cost garage buildings, or mechanical garages (where zoning laws permit such construction) may in specific instances meet a local demand with profit. As a general rule, however, storage garages are notorious as money losers, even under the most favorable circumstances. Those existing garages that do earn a profit for their present owners have, in most instances, some time or other gone through a financial wringer.

In the opinion of the author, there is, therefore, no hope that without some type of subsidy, private enterprise will ever furnish an entire central business a complete parking garage service, as such, on a self-liquidating and profitable basis.

Shall Cities Subsidize Offstreet Parking Terminals? Those who have come to recognize these facts have suggested that cities subsidize offstreet parking space. There is justification for this suggestion. Cities do have a real interest in seeing that parking space is provided to those who wish to come to the city by auto to spend money for goods and service or to transact business. Land values in cities and the resulting realty taxes are predicated on sales and business transactions and on values added to manufacture within the city. Offstreet parking en masse would materially reduce traffic congestion. The real question is this: Shall the city subsidize the private parking lot and garage business?

It is common knowledge that in New York City, the Rockefeller Center Garage parking fees cover only a portion of the operating and fixed charges. Would anyone suggest that New York City subsidize Mr. Rockefeller? He, himself, would blush at the idea. City subsidies of private enterprise are dangerous. If parking is to be subsidized, why not mass transport?

Should Cities Operate Parking Terminals? It is possible, through enabling state legislation, to endow the parking of vehicles in cities with public interest. Cities could thus acquire necessary properties by their right of eminent domain and then proceed to operate parking lots and to construct and operate parking garages as public business.

Under city department operation, however (*i.e.*, one that is revenue producing), the usual yardstick is service even at a deficit, rather than excess of revenues over expenses. Revenues may be collected by the department but expenses usually come from appropriations. The city department must, therefore, operate within a strait-jacket and cannot offer that flexible and aggressive management necessary to operate successfully a large and comprehensive parking lot and garage business. City department operation of parking lots and storage garages would not only produce losses in realty taxes on acquired properties but would earn operating deficits as well. In the opinion of the author this is not a desirable solution of the parking problem.

How About a Parking Authority? In recent years, the "authority" form of management has demonstrated its ability to finance, construct, and operate successfully vehicular toll bridges, tunnels, expressways, and parkways. Why not parking facilities?

Parking lots and garages *could* be operated successfully by a "parking authority." It should be pointed out, however, that choosing locations of lots and garages wisely, constructing and operating them economically, setting varying parking fees tailored to the public demand,—all require business acumen of the highest order. To withstand continued public charges of rate discrimination among different locations, without being forced into increasing deficits on operations, requires superb legal talent. To maintain the continued cooperation of city departments whose activities impinge upon the parking problems and whose prestige may be reduced by the activities of the parking authority are types of problems which require keen political astuteness. A parking authority, therefore, requires a board of commissioners of a high order with mature, broad business judgment reinforced with some political experience, assisted by a highly paid, experienced staff.

The author does not wish to imply that there is any dearth of ingenuity, mature business experience or political astuteness in any city. Far from it. He does wish to leave these thoughts. There is no magic in the word "authority." In order to borrow funds through the sale of bonds secured by revenues only, at rates substantially lower than that of private enterprise, the authority must first demonstrate successful self-liquidating operations. Pending such demonstration, it must be given some financial cushion either by the city, State, or Federal government upon which to borrow funds for the construction of a comprehensive system of parking facilities. The mere creation of an authority can not be complacently accepted as a guarantee of success in solving the parking problem.

Merchant-Supported Parking Terminals. In growing cities, the commercial use of land for parking vehicles is usually an unprofitable business. On the other hand, the passengers in the vehicles that come to the city to transact business, contribute substantially to the profitableness of city business activities. Why not marry the unprofitable parking activities to the profitable business transactions of the vehicle passengers and thus produce a profitable venture? This is, of course, the theory behind merchant-supported parking terminals.

Progressive merchants realize that they have a vital interest in the parking problem, that more adequate parking facilities will attract more shoppers to the city, more frequent visits, more sales. Hence, individual as well as groups of merchants have provided parking spaces for their customers either by operating lots and garages themselves, or by validating auto parking tickets on the basis of purchases. Some do not even require purchases to validate tickets, charging the cost to advertising rather than to sales.

This approach to the solution of the city parking problem is all to the good. It is in the right direction. But it solves only part of the whole problem. So long as merchants *do not own* parking properties, this solution lacks permanency. As this method of meeting the parking demand becomes increasingly successful, parking lots will eventually be forced out of parking use, by the demand created for the properties of higher competitive land uses. Chiselers may cause some merchants to cancel voidable agreements. To pin hopes on this method as a *permanent* solution of the parking problem, the marriage of merchants' establishments to parking terminals must be more than a trial marriage. It must be an indissoluble union impossible of divorce. Only then will the shopper portion of the city parking problem be solved permanently.

To meet the objection of nonpermanency, the idea has been brought forward of a parking district authority with the right to tax property owners. State enabling legislation permits such authority to be formed, if say, the property owners of 60% of the total assessed valuation of the real estate in the downtown area petition the city officials to create it. This is an IFY proposition. If a large enough segment of business property owners volunteers to participate in a joint venture with a city and IF it permits itself to be taxed proportionately to cover probable deficits and parking benefits that differ widely as among property owners, the Parking District will solve the parking problem in the Central Business District.

A Promising Attack on the Parking Problem. This review of the attacks on the City Transportation Problem Number 1 is by no means exhaustive. There are numerous variations. What it adds up to is this: the attacks that have been tried have serious limitations and vary widely in their effectiveness. To use a military analogy—some attacks are like hand grenades, others like bombs or "duds," and still others like "block busters." What is needed is a weapon of atomic bomb proportions—to obliterate completely the parking problem. Such a weapon must depend on its power, not on gadgets, mechanical or legal, but on its ability to release a tremendous amount of energy to shatter the problem. This weapon is in the making, but at present is only in the laboratory stage. Not much attention has been given to it. When its effectiveness has been duly appreciated and recognized, it will come into its own.

The philosophy behind this weapon is rather simple. It is this: the parking problem is created, maintained, and intensified by traffic "generators." A traffic "generator" is any building that attracts large masses of people in autos and large quantities of goods in trucks. Such buildings contain retail shops, department stores, theatres, auditoria, stadia, commercial or professional offices, restaurants, hotels, warehouses, light manufacturing plants and other businesses.

A Parking and Loading Space Ordinance Needed for New Buildings. If cities are ever to catch up with the parking problem, city fathers must

fearlessly place the responsibility with property developers for making adequate provision for offstreet auto parking space and offstreet truck loading and unloading platform spaces in new buildings that are inherently traffic "generators." Predicated on its police power to protect the safety, health and general welfare of the community, every city of any size should place such an ordinance on its statute books at the earliest possible moment. Such a law would act as a stopper on any worsening of the parking problem in the future, resulting from that source.

Parking and loading spaces need not be provided free by property owners. Tenants of these buildings might be required to pay for such space in their rent and they might be permitted to validate parking tickets of their employees, customers, clients and visitors.

Parking and loading spaces might be on contiguous or adjacent property but such space would, in any event, be *available*, in new or altered buildings.

Placing such an ordinance on the books will require two-fisted and courageous officials. Vigorous opposition must be expected from property owners—the very parties who eventually will benefit most from the effects of the law.

Not enough thought has been given by traffic engineers to what constitute adequate requirements for parking spaces by different types of traffic "generators." Hence, to make this law effective, further research in this direction should be undertaken, to provide reasonable yardsticks. Some yardsticks have already been developed by the "laboratories" giving attention to this weapon.

In 1940, for example, New York City passed a Revised Zoning Resolution requiring offstreet loading space in buildings hereafter to be used for manufacturing, storage, or goods display, in department stores, hotels and hospitals, at a rate of *one truck loading berth for each 25,000 square feet of aggregate gross floor area.* Existing buildings not now used for such purposes may not be so used in the future, unless this provision is complied with.

The Regional Plan Association has proposed a more liberal sliding scale whereby each additional truck berth would take care of increasing gross floor areas, and office buildings and hotels would not require as many truck berths as the present law calls for. (See Appendix 1.)

The Board of County Commissioners for Montgomery County, Rockville, Md. (sitting as a District Council for that portion of the Maryland Washington Regional District within Montgomery County) passed an amendment to its Zoning Ordinances requiring that on and after July 5, 1945, no building permit be approved for commercial and industrial buildings that does not make provision for offstreet parking space. (See Appendix 2.)

The City of Pasadena has such an ordinance under consideration. Its

planning commission has recommended its adoption. (See Appendix 3.) Other cities are adopting this procedure.

Parking and Loading Space Ordinance for Existing Buildings. If the parking and loading space ordinance for *new* buildings is found to be successful, then cities should turn the ingenuity of their legal talent loose on the second problem—placing a second ordinance requiring owners of *existing property* to provide similarly reasonable auto parking and truck loading spaces, within a period of 5 to 10 years after the adoption of this ordinance.

Despite this 5 to 10-year period of grace, the effect of this ordinance would be electrifying. An incentive will have been created and definite responsibility automatically placed on the shoulders of the existing property owners. They could not "pass the buck." Smart property owners would immediately obtain options on choice parking locations. They would put engineers and architects to work at once to use their ingenuity in incorporating the new parking and truck loading space with existing properties, to yield maximum revenues from higher rentals on their joint use.

Among the laggard property owners, some hardship cases might develop. In those instances, cities might give relief in several ways: (1) Permit such parking spaces to be located within certain maximum distances from existing properties; (2) plan for property owners block or community parking spaces and truck loading platforms; (3) through enabling legislation, utilize their right of eminent domain to acquire properties and resell them to property owners so that they could meet requirements of the ordinance.

Another mass addition to the supply of offstreet parking space would thus be made. The additional parking and loading spaces would accommodate an increasingly larger number of cars and trucks per space, thus permitting future expansion in city vehicular traffic.

The city itself should then cease to be a major offender. It, too, should provide adequate offstreet parking and truck loading spaces for all of its civic buildings, existing as well as new.

Ordinances Would Induce City Rehabilitation. The two parking ordinances, if adopted in major cities and judicially sustained, would start in motion a wholesale rehabilitation of cities. As suburbs continued to expand, central business districts of the city would expand accordingly. The economic advantages inherent in central business districts would be preserved and enhanced. Cities would grow functionally, up and out.

The present threat to cities of decentralization of commercial activities would disappear. Adequate parking spaces in cities would prevent the further expansion of specialty shops and department stores in the suburbs, at the expense of those in the city.

Cities would assume their major functions of being the seats of industrial, commercial, recreational, amusement and cultural activities

for which they are best fitted. As cities proper specialized more and more on those functions, as the suburbs became increasingly the peoples' homes, and as more and more people traveled back and forth daily from suburbs to the cities to work, shop and play, city realty values would once more begin to rise. Their skylines would take on distinctive forms, reflecting the functional designs of a motor age.

APPENDIX 1

Offstreet Truck Loading and Unloading Berth Requirements Proposed for New York City by Regional Plan Association[1]

Every Building Designed to be Used for							
Manufacturing storage or goods display, dept. store or hospital			Office purposes or hotel for transient purposes			Required no. of berths	
sq. ft. of gross floor area			sq. ft. of gross floor area			Each increment	total
1st	25,000	25,000	1st	100,000	100,000	0	0
next	15,000	40,000	next	50,000	150,000	1	1
next	60,000	100,000	next	250,000	400,000	1	2
next	60,000	160,000	next	260,000	660,000	1	3
next	80,000	240,000	next	310,000	970,000	1	4
next	80,000	320,000	next	330,000	1,300,000	1	5
next	80,000	400,000		330,000	1,630,000	1	6
next	90,000	490,000		330,000	1,960,000	1	7
			next	340,000	2,300,000	1	8
each			each				
adnl	90,000		adnl	350,000		1	

[1] Traffic and Parking Study—Regional Plan Association, Inc. Appendix B, Page 138. Presentation modified by author.

APPENDIX 2

Schedule of Offstreet Parking Space Required by the Amendment to the Zoning Ordinance Enacted by the Board of County Commissioners of Montgomery County, Maryland and Known as Section VII A—Effective July 5, 1945

Types of Buildings	Basic Units	One parking space required for the number of basic units shown	
		Ground floor (number)	Upper floors (number)
Commercial Buildings devoted to:			
retail trade	floor area—sq. ft.	300	500
offices	floor area—sq. ft.	400	750
Restaurant	floor area—sq. ft.	50	
Hotel	sleeping room area—sq. ft.	500	500
Theatres, Auditoria, Stadia, Recreational Establishments	seats number	6	6

APPENDIX 3

Schedule of Offstreet Parking Space
Suggested by the City of Pasadena City Planning Commission
to be Incorporated in a Proposed Zoning Ordinance

Type of Building	Basic Unit	One parking space for the number of basic units shown		
Commercial Buildings				
devoted to:		No of Basic Units		
retail or Mercantile Business	gross floor area sq. ft.	400		
offices		400		
Auditoria				
school	seats number	12		
commercial	seats number	5–8*		
churches	seats number	8–10*		
theatres	seats number	8–10*		
Dwellings				
single family	dwelling unit no.	1	(a)	
multiple family	dwelling unit no.	1	(a)	
Hotels		1st 20	20–40	over 40
Residential	dwelling unit no.	20	4	6
Commercial	dwelling unit no.			
Zone M uses	gross floor area sq. ft.	40,000(b)		

* Subject to further research
(a) No storage area shall contain space for more than 4 vehicles—one offstreet loading space for each
(b) In excess of 10,000 sq. ft.

Summary of Responses to Questionnaire

By City Traffic Engineers, City Planners and Retail Trade Associations on Feasibility and Desirability of Provisions in Zoning Ordinances Requiring Off street Parking of Autos and Loading and Unloading of Trucks in New or Reconstructed Buildings

NATHAN CHERNIACK, Economist, The Port of New York Authority, New York

IN THE paper by the author entitled, "A Statement of the Parking Problem," presented before the 25th Highway Research Board Meeting, there was a suggestion to the effect that the parking problem could be substantially solved in most cities if they would adopt a zoning ordinance or an amendment to an existing one, requiring that, in the future, new buildings or reconstructed existing buildings provide reasonable space for the parking of automobiles and for the loading and unloading of trucks.

At the close of the presentation of this paper, a number of those present suggested that traffic engineers and others interested in the solving of the parking problem be sounded out as to their reactions to the author's recommendations. Thereupon, Mr. S. T. Hitchcock, Secretary of the Project Committee on Parking, promptly proceeded to prepare a questionnaire, responses to which determine the reactions of groups of interested parties.

This questionnaire inquired whether it was feasible and desirable by a zoning law or an amendment thereto, to require that reasonable provisions be made for offstreet parking of automobiles and offstreet loading and unloading of trucks in new buildings to be constructed in the future and existing buildings to be reconstructed. It further inquired whether the respondent would consider the incorporation of such provisions in present zoning ordinances where there were no such provisions in existing zoning laws, as a means of assisting in solving the parking problem. Where existing zoning laws contained such provisions, the questionnaire asked for excerpts of such zoning provisions. Appendix 1 shows the questionnaire prepared by Mr. Hitchcock.

It was then planned to distribute these questionnaires to the following three groups of interested parties in representative cities in the United States: 1. City Traffic Engineers. 2. City Planners. 3. Secretaries of City Retail Trade Associations. Mr. C. W. Prisk, Technical Editor of Traffic Engineering Magazine, a publication of the Institute of Traffic Engineers, undertook to distribute the questionnaires to City Traffic Engineers. Miss Harlean James, Executive Secretary of American Planning and Civic Association, agreed to distribute questionnaires to city planners, members of the American Civic and Planning Association. Mr. C. Irving Baily, Executive Secretary, American Retail Federation, distributed questionnaires to secretaries of City Retail Trade Associations

affiliated with the American Retail Federation. The author undertook to analyze and summarize the responses to these questionnaires.

To date (April 1946) responses were received from 37 Traffic Engineers in as many cities, from 54 City Planners in 31 cities, and from 34 Secretaries of city retail trade associations. (See Appendix II for individual cities represented by the residences of the three groups of respondents.)

Table 1

Responses from Traffic Engineers
Planning Officials and Retail Trade Associations
to Parking Questionnaire

	Respondents	*Cities*
Traffic Engineers	37	37
City Planners	54	31
Retail Trade Associations	34	34
	125	76*

*Eliminating duplicates

In response to the query as to whether it would be *feasible* to require, by a zoning law or an amendment thereto, that reasonable provisions be made for the offstreet parking of automobiles in new buildings constructed in the future or existing buildings reconstructed, it appears that the preponderant opinion of the three groups is that it is definitely feasible. A total of 36 of 37 respondent Traffic Engineers, 51 of 54 respondent City Planners, and 22 out of 34 of the Trade Association Secretaries voted such provisions feasible. It is interesting to note that City Traffic Engineers and City Planners, who must live with the parking problem as part of their professional experience, feel overwhelmingly that such provisions are feasible. The Secretaries of retail trade associations who have other problems to think about and who represent those that would be required to foot the bill for such provisions if required by ordinance so to do, are not as enthusiastic about the feasibility of these provisions as the other two groups.

Table 2

Question 1. Is it feasible to make reasonable provision for the offstreet parking of automobiles a requirement when buildings are constructed or reconstructed by an amendment to present zoning laws?

	Responses			*Percentages*	
	Total	*Yes*	*No*	*Yes*	*No*
City Traffic Engineers	37	36	1	97.3	2.7
City Planners	54	51	3	94.5	5.5
Retail Trade Associations	34	22	12	64.8	35.2

An even greater proportion deemed it feasible to require that reasonable provisions be made for offstreet loading and unloading spaces for trucks in new buildings or reconstructed existing buildings. Thus, 100 per cent of the Traffic Engineers, 96 per cent of City Planners and 76 per cent of Trade Association Secretaries voted these provisions feasible.

Table 3

Question 2. Is it feasible to make reasonable provision for the offstreet loading and unloading of trucks a requirement when buildings are constructed or reconstructed by an amendment to present zoning laws?

	Responses			*Percentages*	
	Total	*Yes*	*No*	*Yes*	*No*
City Traffic Engineers	37	37	0	100.0	0.0
City Planners	54	52	2	96.3	3.7
Retail Trade Associations	33	25	8	75.8	24.2

Apparently there is more agreement about the feasibility of provisions for loading and unloading of trucks than for provisions for the parking of autos.

On the question as to whether parking and loading provisions were considered *desirable*, traffic engineers and city planners were unanimous and close to 80 per cent of the retail trade associations deemed such provisions desirable.

Table 4

Question 5. If there are no provisions in existing zoning laws requiring space for offstreet parking or loading and unloading of trucks, do you consider them *desirable?*

	Responses			*Percentages*	
	Total	*Yes*	*No*	*Yes*	*No*
City Traffic Engineers	33	33	0	100.0	0.0
City Planners	38	38	0	100.0	0.0
Retail Trade Associations	29	23	6	79.3	20.7

In answer to the query whether individuals would consider incorporating such provisions in present ordinances as a means of assisting in solving the parking problem, the vote ranged from 100 per cent to 84 per cent, "Yes."

Table 5

Question 6. Would you consider the incorporation of such provisions in present ordinances as a means of assisting in solving the parking problem?

	Responses			*Percentages*	
	Total	*Yes*	*No*	*Yes*	*No*
City Traffic Engineers	35	36	0	100.0	0.0
City Planners	49	48	1	98.0	2.0
Retail Trade Associations	31	26	5	83.9	16.1

A number of the planners stated that they, as consultants, had suggested the incorporation of such provisions in proposed ordinances, while others named cities that had adopted such provisions. Some, on the other hand, remarked that in very small cities and very large cities it would be found extremely difficult to incorporate such provisions into zoning laws and that these provisions would only aid partially in solving the parking problem.

Respondents from a number of cities very kindly enclosed copies or excerpts from their zoning laws which required provision for offstreet parking. Thirteen cities represented by respondents to the questionnaires now have some offstreet parking or loading provisions as part of their zoning ordinances. Los Angeles adopted these provisions March 7, 1946. Five cities have prepared preliminary or tentative drafts of either zoning laws or amendments thereto requiring provisions for offstreet parking of automobiles and offstreet loading and unloading of trucks. These are before their respective city councils for adoption.

An analysis of the existing or proposed parking provisions in the zoning ordinances of the respondent cities indicates that in 12 of the 17 cities provisions have been made to require offstreet loading and unloading spaces for trucks. Existing or proposed zoning laws in 11 of the cities require offstreet parking in new dwellings; 11 require this of public places of assembly. Only 6 cities, on the other hand, require offstreet parking of autos in commercial buildings. (See Table 6.)

These 18 vanguard cities indicate a fairly definite trend of this effective approach to the eventual solution of the parking problem. Besides these 18 cities, several additional cities are now giving serious consideration to the preparation of zoning laws or amendments thereto to require parking and loading provisions in new or reconstructed buildings. Other cities will undoubtedly follow in due course. Consequently this trend will bear careful watching on the part of traffic engineers, city planners and city officials, generally.

Table 6

Progress in Incorporating in Zoning Laws
Provisions for Loading and Unloading of Trucks and Parking of Autos
in Different Types of Buildings

	1940 Population	Provision for Offstreet Loading and Unloading of Trucks	Provisions for Offstreet Parking of Autos in dwellings	in places of assembly	in commercial buildings
		Respondent Cities Where Zoning Laws are Now in Effect			
1. New York, N. Y.	7,454,995	x	–	–	–
2. Cleveland, Ohio	878,336	x	x	–	x
3. Los Angeles, Calif.	1,504,277	x	x	x	x
4. Kansas City, Mo.	399,178	x	x	x	–
5. Waterbury, Ct.	99,314	–	x	–	–
6. Chicago, Ill.	3,396,808	–	–	x	–
7. Detroit, Mich.	1,623,452	x	x	x	–
8. Nashville, Tenn.	167,402	x	–	–	–
9. Evanston, Ill.	65,389	–	x	–	–
10. Washington, D. C.	663,091	–	x	–	–
11. Lansing, Mich.	78,753	–	x	x	–
12. Richmond, Va.	193,042	x	–	x	x
13. Piqua, Ohio	16,049	x	–	x	x
Total 13	16,540,086	8	8	7	4

		Respondent Cities Where Tentative Drafts of Zoning Laws or Amendments are now under consideration			
1. San Francisco, Calif.	634,536	x	–	–	–
2. St. Paul, Minn. . .	287,736	–	–	x	–
3. Dallas, Texas . . .	294,734	x	x	x	x
4. Wichita, Kan. . . .	114,966	x	x	x	x
5. Toronto, Ont. . . .	657,612	x	x	x	–
Total 5 . . .	1,989,584	4	3	4	2
Grand Total 18 . . .	18,529.670	12	11	11	6

APPENDIX I

Date: _____

City of _____

1. Is it feasible to make reasonable provision for the offstreet parking of automobiles a requirement when buildings are constructed or reconstructed by an amendment to present zoning laws?

Yes ☐ No ☐

2. Is it feasible to make reasonable provision for the offstreet loading and unloading of trucks a requirement when buildings are constructed or reconstructed by an amendment to present zoning laws?

Yes ☐ No ☐

3. Are there any provisions in existing zoning regulations for provision of offstreet parking or loading and unloading of trucks?

Offstreet parking: Yes ☐ No ☐

Offstreet loading & unloading of trucks: Yes ☐ No ☐

4. If there are such provisions, what are they? (Quote or attach a copy)

5. If there are no such provisions, do you consider them to be desirable?

Yes ☐ No ☐

6. Would you consider the incorporation of such provisions in present ordinances as a means of assisting in solving the parking problem?

Yes ☐ No ☐

7. Would you object to having your reply identified in a summary of replies from other cities?

Yes ☐ No ☐

Signed: _____

Title or Position: _____

APPENDIX II

List of Cities Represented in
Responses to Questionnaire on Feasibility and Desirability
of Parking Provisions in Zoning Laws

City	1940 Population	Responses from City Retail Trade Associations	City Traffic Engineers	City Planners
1. Akron, Ohio	244,791		1	
2. Atlanta, Ga.	302,288		1	
3. Arlington, Va.	57,040			1
4. Baltimore, Md.	895,100		1	
5. Bay City, Mich.	47,956		1	
6. Berkeley, Calif.	85,547		1	
7. Boston, Mass.	770,816	1	1	3
8. Bristol, Conn.	30,167	1		
9. Buffalo, N. Y.	575,901	1		
10. Cambridge, Mass.	110,879			1
11. Charlotte, N. C.	100,899		1	
12. Chicago, Ill.	3,396,808	1	1	1
13. Cleveland, Ohio	878,336			2
14. Colorado Springs, Colo.	36,789	1		
15. Dallas, Texas	294,734		1	
16. Danville, Va.	32,749	1		
17. Denver, Colo.	322,412	1		
18. Detroit, Mich.	1,623,452	1	1	2
19. Evanston, Ill.	65,389		1	
20. Flint, Mich.	151,543		1	
21. Fort Wayne, Ind.	118,410		1	
22. Grand Island, Neb.	19,130	1		
23. Grand Rapids, Mich.	164,292	1		
24. Greensboro, N. C.	59,319	1		
25. Greenville, S. C.	34,734	1		
26. Greenwich, Conn.	35,509	1		
27. Harrisburg, Pa.	83,893			1
28. Hartford, Conn.	166,267	1		
29. Indianapolis, Ind.	386,972		1	
30. Kansas City, Mo.	399,178	1	1	2
31. Lansing, Mich.	78,753		1	
32. Los Angeles, Calif.	1,504,277			3
33. Louisville, Ky.	319,077		1	
34. Miami, Fla.	172,172		1	
35. Milwaukee, Wis.	587,472	1		1
36. Minneapolis, Minn.	492,370		1	
37. Nashville, Tenn.	167,402	1		
38. Newark, N. J.	429,760		1	1
39. New Haven, Conn.	160,605	1	1	
40. New Hope, Penna.	1,053			1
41. New York, N. Y.	7,454,995			10
42. Oakland, Calif.	302,163	1	1	
43. Oklahoma City, Okla.	204,424	1		1
44. Omaha, Neb.	223,844	1		

45. Orange County, Calif.	130,760			1
46. Ottumwa, Iowa	31,570	1		
47. Pasadena, Calif.	81,864			1
48. Philadelphia, Pa.	1,931,334			2
49. Phoenix, Ariz.	65,414			1
50. Piqua, Ohio	16,049			1
51. Pittsburgh, Pa.	671,659			2
52. Portland, Ore.	305,394	1	1	1
53. Portsmouth, Va.	50,745			1
54. Providence, R. I.	253,504	1	1	2
55. Pueblo, Colo.	52,162	1		
56. Richmond, Va.	193,042	1	1	1
57. Rochester, N. Y.	324,975	1		
58. San Diego, Calif.	203,341	1		
59. San Francisco, Calif.	634,536		1	1
60. San Mateo, Calif.	19,403			1
61. Schenectady, N. Y.	87,549		1	
62. Seattle, Wash.	368,302	1	1	1
63. South Bend, Ind.	101,268		1	
64. Springfield, Mass.	149,554		1	
65. St. Louis, Mo.	816,048		1	1
66. St. Paul, Minn.	287,736	1	1	1
67. Terre Haute, Ind.	62,693	1		
68. Texas City, Texas	5,748			1
69. Toledo, Ohio	282,349		1	
70. Toronto, Ont., Canada	657,612		1	
71. Tucson, Ariz.	36,818			1
72. Tulsa, Okla.	142,157	1		
73. Washington, D. C.	663,091		1	4
74. Waterbury, Conn.	99,314		1	
75. Wichita, Kans.	114,966	1	1	
76. Wilmington, Del.	112,504	1		
Total 76	32,543,129	34	37	54

Report of Discussion

STUART D. CURRIER, Supervisor, Reporter, Bergen County Planning Board, Bergen County, New Jersey

CALLING on his vast background of experience, Mr. Harland Bartholomew, who presided, covered in a broad general manner an outline of the subjects that were to be discussed by the principal speakers on the program.

Paul Oppermann, who has served in many capacities in Federal Government Service, founded his talk on the essentials required by metropolitan areas and listed in order of urgency the subjects that should be undertaken by the proper agencies within these areas.

Zoning, subdivision control, land value, tax structures, highway pattern and the master plan were all discussed in a manner that assured the listener that wide experience was inspiring the message.

Robert Kingery, Director, Chicago Regional Planning Association, presented the problem of Chicago Metropolitan Planning.

The area covered by Mr. Kingery's plan includes a part of three States and also includes fifteen counties, 250 municipalities, 240 townships, nearly 8000 square miles of land and nearly 4,000,000 people.

The association when organized was confronted by the problem of how to do this job of planning.

There appeared to be two choices: One, to hire a large staff and to work out all of the phases of a master plan or choice number; two, to contact all local authorities and encourage and guide them to produce master plans with the Regional Agency providing the necessary coordination. The latter plan was decided and thus no duplication was necessary and each community played an important role in the overall plan. Highway and street plans from the various communities had to be fit into the overall pattern and this task was not too easy to accomplish. The use of land in this area was more or less regulated by zoning. Only thirty municipalities and no counties had adopted zoning regulations when the Regional Plan was first enacted. By 1946, through the encouragement rendered, more than 130 communities now have zoning. Parks and Playgrounds have received a generous amount of study and the results have been most gratifying. The association has devoted considerable time to the development of airports and pioneered the practice of airport zoning.

Park H. Martin, Executive Director, Allegheny Conference on Community Development, Pittsburgh, Penna., presented a paper on "Experience in Allegheny County, Penna."

The Pittsburgh industrial area includes Allegheny County and the adjoining counties of Beaver, Washington and Westmoreland. The 1940 population was 2,082,556 persons.

The region includes four cities and 121 boroughs and townships with 747 square miles of area.

The topography is one of a mixed character with both narrow valleys and rolling table land. Floods have frequently menaced the region. Control of watersheds is one of the pressing problems. The area is served by numerous planning boards, both County and Municipal. County zoning legislation is available. An excellent public work stock pile has been developed by the various agencies. A technical committee on major improvements is a prime mover in the field of future development. The Allegheny Conference on Community Development is set up in a similar manner to the unofficial regional planning associations. It is financed by private capital and is interested in the progressive orderly development of the region. Considerable research work has been accomplished by this agency.

Some of the outstanding studies include the following:

(a) Description of its physical characteristics topography, use of land, etc., (b) Its people, Population Characteristics, (c) Its industries, (d) Material resources, (e) Transportation, (f) Terminal facilities, (g) Tax structure, (h) Governmental organization, (i) The community as a place in which to live, (j) Future potentialities.

Cooperation with governmental agencies was of prime importance to make the program a success.

Gordon Whitnall, Planning Consultant, Los Angeles, covered the subject Metropolitan Growth, Traffic and Parking.

Mr. Whitnall's presentation in the form of "Here's a question, I don't know the answer," was both humorous and instructive.

The problems of street and off-street parking were approached from many angles. Underground facilities as well as aerial parking (building roofs) were presented with a doubt of the problematical success of the particular ventures.

Considerable reference was made to the traffic control system in operation in the City of Dallas with special mention of pedestrian control by means of tickets with fines of three dollars for offense.

No parking in downtown areas was also discussed and as Mr. Whitnall spoke, that ordinance was being placed in effect in Dallas.

IN THE CITIES AND TOWNS

DALLAS AND TEXAS TOWNS

The Personality of a City*

HERBERT GAMBRELL, Director of the Dallas Historical Society
and Professor of History, Southern Methodist University, Dallas, Texas

CITIZENS of Dallas are currently looking at a dazzling blueprint for a postwar city, and with the help of oratory and tons of printed matter, they are considering what it means. Obviously, postwar plans, so current and so plentiful, tend generally to present confusing mixtures of idealism, crackpotism, and realism, so that it is sometimes suspected that all of them emanate from bright-eyed gentlemen who specialize in stairways to Utopia. Yet there are exceptions. The postwar Master Plan of Dallas is a logical—perhaps historically inevitable—outcropping of personality traits that have been in evidence, and in use, for a century.

That cities have recognizable traits of character and personality is a notion derived from folk wisdom, not metaphysics. The personality of Dallas was well defined before most of its present citizens were born, and its traits of character and mind seem to have undergone little change since the 1840's and the 1850's.

A discerning foreigner, if he should study the current Master Plan, would probably conclude that present-day Dallas is characterized by such traits as aggressiveness, promotionalism, opportunism, investmentism (which is a sort of civic merchandising); and that it chooses its civic objectives after shrewd forecasts of the probable direction of economic and social winds. The first third of Dallas's century of history shows that these traits are not new. They are the traits that transformed a muddy-river settlement into a city.

Dallas is an example of a city that man has made, with little help from Nature, and practically none from Providence. To a great degree, all cities are man-made; but most of them received their initial impetus from their favorable position.

In founding his settlement in the Republic of Texas, John Neely Bryan intended to establish a trading post to tap the Indian trade. The relatively easy crossing of the Trinity River near the present Dealey Plaza led him to hope that a profitable Indian trade could be built up there. There was one oversight: no prosperous or sedentary Indians passed this place in the normal course of their wanderings. Bryan found this out soon enough; but he had already burned his bridges behind him in Arkansas, and he stayed to lay the foundations of a trading mart of another type. This is the first example of what was to be a trait of Bryan's city—its ability to shift its goal without changing its essential objectives.

*The text of the talk which Dr. Gambrell gave before the APCA appeared in the Southwest Review, Spring, 1945

It is likely that a city should have developed within a reasonable radius of the site of Dallas, perhaps even as close as Hord's Ridge, or Cedar Springs, or Mustang, later known as Farmers Branch. But what real advantages of location did Bryan's Dallas possess over any of these during the early years? "Perhaps," Frank H. Cockrell wrote, "a freshet filled the channel [of the Trinity] when he saw it and emphasized navigation, which was one of the determining factors."

This may be *ex post facto* reasoning, but it is certain that navigation is the oldest and most persistent theme in the promotional activities of Dallas, and it is just about as certain that it was a man-inspired dream, and not something which Nature made evident or even probable. Witness this earliest reference to Dallas, in the *Telegraph and Texas Register*, Houston, November 22, 1843:

> It is believed that the Trinity can with little difficulty be made navigable to Dallas. . . . Should these expectations be realized, the upper Trinity will soon be one of the most desirable situations of Texas, and the colony in the Cross Timbers will become the center of a flourishing settlement.

This item was inspired, no doubt, by someone interested in the development of Dallas; it is unlikely that such an idea occurred to the editor of the *Telegraph* in his sanctum at Houston.

Cockrell, who knew Bryan in his old age, wrote that less experienced town-promoters would have chosen Cedar Springs or Hord's Ridge, but that Bryan purposely passed them by and chose the sandy plateau for his townsite. For John N. Bryan was not a farmer-come-to-town, but an experienced town promoter. He left his father's stock farm in Tennessee at an early age, worked in a mill, moved to Nashville, where he studied law, then, in 1833, crossed into Arkansas to become an Indian trader. He and a partner located and promoted the townsite of Van Buren, Arkansas (of more recent Bob Burns fame); and not until after he had decided to establish his town in the Republic of Texas, did Bryan dispose of his interest in Van Buren.

Four years after Bryan settled on the Trinity, he was joined by John C. McCoy, who also had had some experience in town promotion. McCoy had helped start Kansas City. He had been "present at the first sale of lots . . . and with his own hands wrote out the title deeds to the property then and there conveyed." Bryan and McCoy were never partners in the formal sense; but in the all-important matter of promoting the development of Dallas, they were colleagues. After Bryan relinquished his interest in the Dallas townsite to Alexander Cockrell, McCoy remained to counsel the new proprietors in public relations.

Thus, the foundations of Dallas as a town were laid by two men who knew what they were about because they had done it before. From the start, the direction of Dallas' growth was consciously shaped. This furnishes perhaps the most important clue to its subsequent development and to the essence of its spirit.

Bryan, who was the sort of man whose reach exceeded his grasp, projected a townsite, laid off lots, and soon there was a word-of-mouth campaign to attract settlers. John B. Billingsley, who started from Missouri to find the Texas metropolis in 1844, gives evidence of its effectiveness:

> We had heard a great deal said about the three forks of the Trinity and the town of Dallas [he wrote]. This was the center of attraction and it sounded big in the far-off states. We soon reached the place we had heard of so often; yes, the place; but the town, where was it? Two small log cabins—this was the town of Dallas, and two families of ten or twelve souls was its population.

Previous to Mr. Billingsley's disappointing discovery of the "center of attraction," Bryan had been joined by two families who had come first to the present site of Bonham, then had trekked to Bird's Fort, and finally had drifted—one, literally, in a canoe—to Bryan's cabin. The Gilberts saw no future for the place and returned to the Red River country; the Beemans remained, and Bryan married one of their daughters the next year.

It was this promotional campaign that had brought McCoy from Indiana to be sub-agent for the Texian Land and Emigration Company. He, too had arrived at Bryan's cabin, "expecting to find Dallas a well-built town, such as the maps and charts of Peters Colony represented it to be." Why McCoy chose Dallas rather than Cedar Springs or Farmers Branch, both of which were nearer the scene of his work, is not of record; perhaps it was the opportunity that he sensed to help promote a city. At any rate, he came; and he remained, to become the leader of the city and of the local bar, until his death in 1887.

If Bryan, during the early days of Dallas, missed a trick, it is hard to discover what it was. For example, he stole a march on the rival communities when he got his town made a postoffice of the Republic of Texas late in 1843. He became the first postmaster, but after holding the position for three months and receiving only 18½ cents for his work, he resigned. That was no job for a promoter.

After Texas entered the Union, Bryan, a sort of one-man Chamber of Commerce and Citizens Council, induced the First Legislature to create Dallas County and designate his town as the temporary county seat. Dallas Countians, already accustomed to coming to Dallas for their mail, became accustomed to attending court there, but not all of them were convinced that Dallas should be the permanent seat of justice. At the first election, August 5, 1850, there were one hundred ninety-one votes for Dallas, two hundred seventy-nine against her. At the second, Dallas won by twenty-eight votes.

The promotional skill of the founders was directed not only toward securing for Dallas every possible advantage over neighboring towns, but also toward creating a sense of city-building, as contrasted with town-building, among the inhabitants. J. Wellington Latimer, publisher of a

paper in Paris, Lamar County, decided that the Trinity region offered greater opportunities. In 1849 he moved the "weekly weakling on a little ox cart" to Dallas and began publication of the *Cedar Snag*, soon rechristened the Dallas *Herald*. No other town in the county boasted a newspaper—and if the county seat had gone to Hord's Ridge or Cedar Springs, the paper doubtless would have followed it. But the paper was here, the courts were here, the postoffice was here, and here all hands worked to keep them. A county seat with a newspaper is quite a different place from a crossroads town without a press. Bryan and McCoy and Latimer knew this and worked to keep the advantage. One doubts if it would be possible for a town to put on city airs without the aid of a newspaper; no one seems ever to have tried it.

Even in its early development, Dallas had the magnetism of potential opportunities which drew entrepreneurs and accentuated the urban, cosmopolitan atmosphere. Maxeime Guillot, for example, arrived in New Orleans from France early in 1850. He was a skilled artisan—a carriage maker. Yellow fever in New Orleans and a Gallic yearning for seeing the frontier drove him to Shreveport, then to Denton County, and finally to Fort Worth, where Major Russell employed him as a wagon maker for the government. When the troops were removed from Fort Worth, Guillot came thirty miles east to Dallas and established a carriage factory—the only one in this part of Texas and the first factory of any kind in the village of Dallas. Surely a frontier trading post that had a newspaper, a factory, and a Frenchman, with a wife fresh from Paris, was on its way toward becoming a city.

In 1855 an amazing procession passed down Main Street to the river. Two hundred Europeans, who had walked in wooden shoes from Houston, were on their way to establish La Reunion, a few miles west of the Trinity River. Victor Considerant, apostle of Fourierism, had visited Texas earlier, selected the site for his phalange, and had recruited members from the artisan and professional classes of French and Belgian cities. And here they were. It is not recorded that the Dallasites, who probably were as firmly opposed to Socialism then as now, protested against the communist settlement. On the contrary, John C. McCoy had aided Considerant in arranging for the purchase of land, and merchants knew that even communists could be customers.

The denouement was not long coming. The communal experiment was to have been an agricultural colony; but the colonists, with few exceptions, were city folk. Within two years, the project had failed, and the one hundred and ten colonists moved to Dallas before the 1860 census.

The effect of this influx of old-world city-dwellers would be hard to overestimate. They were tailors, shoemakers, jewelers, naturalists, watchmakers, artists, weavers, stone masons, dancing masters, milliners, musicians, pastry cooks, physicians, nurserymen. Their little shops stood on the muddy square alongside Haught's saloon, Smith & Patterson's

general store, and McCoy's law office. Dallas children attended dancing school, studied painting, music, and fencing, and their mothers served French pastry from the bakery at a time when housewives in near-by Texas towns of larger population had to be content with potato pies.

The town looked on with approval when Nicholas Darnell, manager of Mrs. Sarah Cockrell's new three-story St. Nicholas Hotel, opened the establishment with a grand ball. A contemporary chronicler described the myriads of lamps reflecting a mellow glow from the polished ceiling, the tapestries from the old South, the half-circle balcony adorned with the United States and Texas flags, the decorations of cedars, evergreens, and wild flowers; the "long train of handsomely gowned matrons, becomingly attired young women . . . with the debonair and faultlessly dressed escorts in evening dress of Prince Alberts." John C. McCoy led the grand march, "a beautiful young lady listless on his arm, gracious and smiling."

This was reported in the *Herald*, which, eight years before, had "taken pains to ascertain the present [1851] population of our village . . . white inhabitants, one hundred twenty-three; negroes, thirty-seven; total, one hundred sixty."

All this was taking place in the muddy middle of a frontier prairie, inaccessible to outside influence. A community was being changed and fashioned by its internal forces, by the quality of its population. Man-made, man-projected—this was true of Dallas during its first years, as well as later.

Before the Civil War, Dallas was incorporated (1856); and it had, in addition to the usual small-town stores, a lyceum, rental library, photographer, bank, factory, jeweler, cabinetmaker, milliner—even an insurance agency. It had held its first Agricultural and Mechanical Fair; it had suffered a fire not so spectacular but proportionately just as inconvenient as the later Chicago fire; and it had entertained a traveling circus which exhibited a live elephant.

Within the limitations of its physical facilities, Dallas had already become, psychologically, a city. This does not mean, of course, that its sustenance was not drawn from agricultural pursuits, or that a good portion of its people were not recently from the farm. It does mean that urban arts, crafts, and amenities were flourishing, and that a true urban spirit was in the making. There already existed a determination among the inhabitants to develop Dallas as a commercial city, rather than as a town whose economic and social life revolved around a general merchandise store or a cotton gin.

After the Civil War, new citizens reinforced the already established pattern; many deliberately chose Dallas because it promised to grow and become great; others fell in with the group psychology after they arrived. Even before the coming of the railroads, this was true; after rail transportation was established, it was increasingly evident.

The railroad almost missed Dallas. A legislative act required the Houston and Texas Central to cross the Trinity River in Dallas County. Most Dallasites thought that this meant it must pass through the town; but the engineers, coached perhaps by the company's treasurer, determined that the best crossing was eight miles below Dallas. Aggressive civic leaders determined otherwise. A bonus of $5,000, a right-of-way, and a grant of one hundred and fifteen acres brought the railroad in 1872 within walking distance of Dallas.

The H. & T. C. immediately promoted a competing town around its East Dallas station. This new town could perhaps have induced newcomers to settle in it, and might have outstripped Dallas in population. But the "terminal merchants," who had moved up the line as the road was extended, came under the spell of Dallas leadership and decided to build their stores alongside the pioneer establishments near the courthouse. In one day they bought seventy lots on Elm Street between Jefferson (now Record) and Akard Streets.

When the Texas and Pacific Railroad, angling for the best subsidies, decided to build through Corsicana to El Paso, Dallas's aggressiveness had been sharpened by its previous experiences. An oblique attack was decided upon. Dallas leaders first proposed to build a competing line to Jefferson, but finally inspired the Dallas representative in the Legislature —a former mayor—to write into a railroad act a provision that the T. & P. should cross the H. & T. C. within a mile of Browder Springs. No one in the legislature or the railroad lobby inquired where Browder Springs was; but, when the line was surveyed, it was found on the edge of Dallas—where Representative Lane and Colonel Sterrett knew it was. The Springs furnished Dallas's drinking water.

Again, the railroad engineers found a better crossing of the Trinity farther from Dallas; again, Dallas rose to the occasion, raised $100,000, and donated the Pacific Avenue right-of-way to the railroad. That was the metropolitanism and investmentism of Dallas in the 1870's. Country folks would probably have argued and waved their arms, instead of using them to reach for their wallets.

With the railroads came telegraph lines, Associated Press service, and, even more important, a flood of new citizens. The terminal merchants were followed by Swiss and German settlers, already habituated to city life, and by business men from the Mid West and Northern cities. During the 1870's the three religious groups which in the United States are traditionally urban established congregations in Dallas. St. Matthew's mission became a parish, with a resident rector, and in 1874 became the cathedral church for all North Texas. Temple Emanu-El was organized in 1872. The Church of the Sacred Heart was established in the early 1870's, with a parochial school taught by the Ursuline Sisters.

Before the panic of 1873, the H. & T. C. had reached Denison to connect with the M. K. & T. Dallas now had two lines to the north,

one to the Texas coast, and another to Shreveport. After that, every index, from building permits and freight loadings to the census of variety theatres and disreputable characters, attested that the city was a reality.

As early as 1872, the *Texas Almanac* pointed Dallas out as one of three North Texas towns already "beginning to put on the airs of a city." That her rivals even at that time recognized Dallas's city-building psychology is evident from the Fort Worth *Democrat's* complaint in 1872 that "The first thing the children are taught to speak is 'Hurrah for Dallas!' and the tyro chirographer scrawls it in writhing characters over a ream or two of foolscap."

Dallas was able to "put on the airs of a city" because, during the first third of its life, it had developed these conspicuous traits:

Aggressiveness: a sort of Mid-Western "up-and-at-'em-ness."

Metropolitanism: a will to become a city and a determination to acquire whatever was involved in that.

Promotionalism: a skill and a technique for attaining its civic objectives.

Opportunism: a technique for achieving its ends by oblique methods, if frontal attack failed.

Investmentism: a willingness to pay the cost of what it sought, and a determination to make the investment pay.

Self-appreciation: a consciousness of its own worth and shrewdness. (Outsiders sometimes mistake this for arrogance.)

Superiority complex: an unexpressed but not carefully concealed feeling of superiority over other Texas cities, which would have made it difficult in 1872 (or 1945) for Dallas to win a popularity contest.

Competitive determination of civic objectives: the very human desire to want something more keenly if someone else is trying to get it.

These traits and attitudes early became a part of the personality of Dallas, and they have persisted down to the present day. Superficially, perhaps, there has been some change in the mode of expression, but it is improbable that the fundamentals have changed.

Has this aggressive—and progressive—policy paid dividends for Dallas? According to the record thirty-five Texas towns were larger than Dallas in 1858 and only twenty-three were smaller. It would probably have been impossible at that time to convince the four hundred inhabitants of Montgomery, the six hundred of Boston, or the seven hundred of Indianola, that little Dallas had something they lacked—call it promotional skill, intangible resources, city-building determination, or what you will. Yet, by 1940, Dallas, with almost three hundred thousand inhabitants, was second among Texas cities—while Montgomery's population was seven hundred and fifty; Boston's, one hundred and thirty-five; and Indianola's, zero.

Seventy-three years after a neighboring newspaper complained that Dallas babies were being taught to shout "Hurrah for Dallas!" these children's children have created a Master Plan which even more emphatically, shouts the same sentiment. The traits that motivate that Master Plan are certainly as old as the city itself.

Dallas Plans Again

WOODALL RODGERS, Mayor of Dallas

DALLAS is happy to welcome the delegates and visitors to the annual conference of the American Planning and Civic Association, and we hope that your stay here may be both pleasant and profitable. The best we have is yours. We feel that it is a signal honor to act as host to such a splendid group of civic leaders and city planners from all parts of the Nation.

We like to feel that the enterprising and progressive spirit of our city may have attracted the attention of those interested in good city planning and influenced the decision that the annual conference be held in our midst.

Dallas does believe in city planning because we want to have a *good city.*

And we believe a good city is:

First: A city in which all the great scientific and technical advances of our civilization, from building construction to mosquito control, are used to the fullest extent for the benefit of every citizen;

Second: A city that is well-arranged upon its site, with its residential, commercial and industrial areas, and its transportation channels, all harmoniously inter-related;

Third: A city in which business and industry can be conducted expeditiously, pleasantly and profitably;

Fourth: A city with good residential neighborhoods for everyone—neighborhoods designed for the raising of fine citizens, neighborhoods that are spacious, attractive, private, safe and stable—neighborhoods with plenty of park area and large school grounds;

Fifth: A city so efficiently disposed that the essential municipal services and facilities can be provided at a minimum tax cost.

Planning is not new to Dallas. Dallas first planned in 1908. Under the inspiration of its great civic leader, Mr. George Bannerman Dealey, well known to this group and recently gone to his reward, Dallas brought Mr. George E. Kessler, nationally known City Planner from St. Louis, to make its first plan. It is true that public appreciation of good city planning was then very apathetic. The people were uninformed as to its great value, yet through the years the Kessler Plan has guided and directed, more than we might realize, the growth and development of our city.

No bond issue was voted to put the plan into effect. It was not properly financed, but it has served as a guide in many ways to the over-all improvement program that followed, and what improvements were undertaken were generally according to the "Kessler Plan."

Even now, thirty-eight years later, we are realizing its first and main objective—a great Central Boulevard, beginning at the northern city

limits, extending through to the south, a distance of ten miles, with a minimum of 182 feet, removing Southern Pacific railroad tracks from the right-of-way the entire distance and at a total cost of ten million dollars, to bring Dallas one of the Nation's most useful traffic arteries and most beautiful parkways. Central Boulevard itself has justified the Kessler Plan and is a living example of the principle that "A noble, logical diagram once recorded will never die."

Mr. Kessler revised his plan again in 1919, and in 1929 it was revised again under what is known as the "Ulrickson Plan," with a bond issue of 23 million dollars to support it. Dallas has been learning more and more through the years the value of good planning.

When the Japs struck at Pearl Harbor civilian construction immediately stopped—the Nation went to war. Manpower and materials were not available even for necessary maintenance and repairs. It was evident that the war would be long and that progress at home would have to be postponed until the day of liberation.

But planning in Dallas never stopped. Immediately the City Council began to survey the need of a new plan and to prepare for the time of reconversion and the new postwar era when the lights would go on again all over the world. They surveyed the Nation for an outstanding, experienced, nationally known City Plan Engineer to direct and lay out a new plan for Dallas. The name of Mr. Harland Bartholomew of St. Louis occurred repeatedly on the horizon, and after investigating his work on the ground in several cities of comparable size to Dallas he was employed in 1942 to make the Master Plan for Greater Dallas.

The City Plan Commission of 15 members worked tirelessly with the Planner to bring out these reports periodically, with recommendations to the Council for adoption.

A committee of 250 of our civic leaders—representative of all phases of civic life and all groups and classes of citizens, with proven interest in the general welfare of our city, was formulated and acted from time to time in conference with Mr. Bartholomew on making this great plan.

The plan itself consisted of 15 reports including streets, sewers, parks, schools, zoning, transportation, land use, administrative policy, capital expenditure, aviation, housing, public buildings, and covering every phase of City Government and Public Works.

At the end of three years the plan was complete. When V-J Day came Dallas was ready for its postwar program of public works and improvements. It expanded its boundaries 50% to plan for a city of a million people and set its program accordingly—uniting several adjacent municipalities into one mother city leaving less than 10% of the metropolitan Dallas population out of its city limits and giving a united front in building a greater and a better Dallas.

A bond issue of 15 million dollars was voted to tide over the period of planning and reconversion until we were able to determine the needs

of the postwar period. Then when V-J Day came we considered an immediate program and after due deliberation carried to our citizenship for their approval an additional bond issue of 40 million dollars. Principal items in this program were as follows:

1. Schools—10 million dollars.
2. Parks—3 million dollars.
3. Streets—Opening and widening—9 million dollars.
4. Aviation—5 million dollars.
5. Public Buildings—13 million dollars, including
 a. A Municipal Center containing 20 acres in the downtown district of Dallas and to include the following buildings:
 1. Downtown Auditorium—7 million dollars.
 2. New City Hall—2½ million dollars.
 3. New Public Library—1 million dollars.
 4. Public School Administration Building—½ million dollars.
 5. Livestock Exhibit Building and Coliseum at Fair Park—2 million dollars.

A committee of 100 outstanding civic leaders have been selected as "The Citizens Planning Council" to keep alive public interest in the plan and stand guard that its essential features may be carried out in the years to come.

Cities have personality and character even as individuals—reflected in the minds and thoughts and in the very heart and soul of their people, and expressed in various ways in their community thinking. In addition to the charitable and cultural efforts and accomplishments, it is distinctly reflected in the nature of the public buildings. The City Hall, the Court House, the Public Library, the Auditorium, and the Civic Center bespeak the tone and quality of the citizenship of the city which they serve.

The City Hall should be built of architecture that will make it an outstanding structure and likewise command respect for the government which it represents. It should be a source of pride to every citizen and a symbol of service and protection. Many cities are much alike—few distinguishing features set them apart one from another, but an alert and progressive community spirit will express itself in no uncertain way.

The Civic Center is the most outstanding civic accomplishment of any city—and an expression of community thinking, more than any one feature, that marks the cities of our Nation. Seeing this demonstrated in other cities like San Francisco and Los Angeles on the West Coast, Denver, Cleveland and St. Louis, and other American cities, Dallas for its first time in history voted bonds for its public buildings, and the Council voted to place them on its Municipal Center, two blocks from its central downtown hotel section—clearing a blighted section, now in the purchasing stage. Plans are being drawn and construction will start as soon as manpower and materials are available. We feel that we

have justifiable pride in this accomplishment which marks a forward and advanced step in the development of our city.

The School Program calls for new schools and all needed park and recreational playground facilities around the present schools, including adequate gymnasiums for both boys and girls, and to make the schools the great community center for the whole family.

The Park Program calls for a play park of not less than 5 acres within one-half mile of every home, and a play field of at least 10 acres for older boys and girls for larger games within a mile of every home, several large parks in different sections of the city and a large outer-park system surrounding metropolitan Dallas.

In addition to Central Boulevard the Street Plan includes an inner traffic loop around the city known as Memorial Parkway, dedicated to the heroic dead of World War II, with a minimum width of 150 feet, esplanaded and beautifully arranged and landscaped at a cost of 6 million dollars. The Street Plan also consists of complete cooperation with the state and Federal Governments on the interstate system of six distinct routes through the city.

In aviation geographic and climatic conditions as well as heavy patronage and crossroads of travel favor Dallas. Leading the way among American cities, Dallas has functionalized aviation and is the owner of three municipal fields, developed and used for three separate and distinct purposes, to classify properly and segregate the respective fields of aviation.

"*Commercial*"—Love Field serves schedules of commercial aviation alone.

"*Military*"—Hensley Field, owned by the city and leased to the Federal Government at a dollar a year, serves military flying alone—both Army and Navy.

"*Private*"—Red Bird Airport, of a thousand acres with runways three thousand feet long, is now being constructed to serve private flying alone—including training of pilots and all flying except commercial airline scheduled flying and military use.

Aware of the cultural advantages to our city, the City Council voted ten thousand dollars for the Dollar Symphony Orchestra provided civic leaders raised an annual budget of 150 thousand dollars. This they did and gave our city one of the outstanding Orchestras of the Nation in 1946. Already its permanent success is assured—a notable civic achievement.

Dallas also looks to the future—Dallas is now buying a thousand acres to be the home of the "Dallas Arboretum," a part of our Outer Park System and privately endowed for its maintenance. A modern progressive cultural achievement of good city planning, it will propagate trees and plants adapted to this section and furnish our Park System flowers, shrubs, plants and trees also for beautification.

The planning and achievement of civic accomplishment and governmental improvements is infectious. Successes invite additional planning and undertakings. Already Dallas is cooperating fully with the Federal Government program on the Trinity Watershed, with its great plan of flood control, water conservation, soil erosion and soil conservation, for which in the North Texas-Dallas district alone 18 million dollars have been voted by Congress under the Rivers and Harbors Bill and construction is now underway. Fifty million dollars have been voted for the lower Trinity improvement and navigation and later will be the connecting link of navigation from Dallas to the Gulf; ready for appropriation before the war and certain in the immediate future, this program will reclaim a mote of a mile in width through the heart of our city, removing great slum sections. It will connect Dallas with the ports of the world and give us water rates to nullify rate discrimination against this section.

Though in the planning stage, Dallas visions and prepares to build a great concrete stadium to seat one hundred thousand people—the home of the Cotton Bowl which, now seating fifty thousand, has long since proven inadequate to take care of the demands that are upon it as the Great Sport Center of the Southwest.

So Dallas plans again and in its planning has brought to realization the dreams of its civic leaders and planners for more than a quarter of a century, and with bond issues and general funds available has charted and earmarked a public improvement program of one hundred million dollars to be realized within the next ten years, covering every branch of governmental service, expansion and improvement.

To vitalize a city plan, the interest and understanding of its citizenship is necessary in its making as well as in carrying it out. During the consideration of the reports involved and of the many features included, neighborhood meetings were held with our City Plan Engineer in North Dallas, South Dallas, East Dallas, and West Dallas in school houses and with public groups. Our two daily newspapers constantly studied and brought to the people all available information concerning the plan. Many valuable suggestions were made from neighborhood groups and civic leaders which were carefully considered and incorporated in the plan by the City Plan Commission. A revision of our zoning ordinances to modern requirements was carefully studied and passed. Public hearings before the City Plan Commission and before the Council on improving features were repeatedly held; many night meetings with citizens interested gave a continuous study, civic interest and understanding to the plan, and finally when adopted after careful survey of its requirements and to finance the first ten years of the program a bond issue of 40 million dollars was submitted to the people of Dallas last December, which passed by an overwhelming vote on each issue. The town was united and its people all pulled for the entire program—

knowing that it was necessary for the future growth and development of our city.

So now Dallas faces the challenging period of building anew, modernizing our city and our services and working towards an over-all comprehensive Master Plan. While geography, climate and resources have favored Dallas, it is a man-made town. The spirit of progress and achievement of its citizenship has attracted the eyes of the Nation. Its future is certain and its destiny is determined. Its comprehensive plan, though elastic, is fashioned and complete. The ten-year program of building and accomplishment has been financed by a vote of its people. Progress is in the air—bringing modern science and technique in the highly developed business of today to governmental affairs. Dallas looks to the future with confidence and determination.

"The difficult we shall do immediately, the impossible will take a little while longer." To the city useful and the city beautiful we have dedicated our best effort, believing in the admonition of the great sage who said:

"Make no little plans; they have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever-growing insistency. Remember that our sons and grandsons are going to do things that would stagger us. Let your watchword be order and your beacon beauty."

Public Parks in Dallas

S. HERBERT HARE, Planning Consultant, Kansas City, Mo.

FOR more than a third of a century Dallas has shown an active interest in planning. In 1920, when the city had less than 100,000 population, the late George E. Kessler prepared a comprehensive city planning report in which parks and parkways were given particular attention. At that time Dallas had eight detached park properties, in addition to esplanades in two streets. The larger parks were Oak Lawn Park, now known as Lee Park; City Park; Forest Park, now the Marsalis Park Zoo; and Fair Park. Mr. Kessler recommended certain connecting boulevards and parkways, and some additional park property. The most important recommendations were Turtle Creek Parkway; the area about White Rock Lake, at that time a water supply reservoir; and a parkway along Mill Creek through the center of the city. The two former projects have become valuable additions to the park system, but the opportunity for realizing the Mill Creek development has been lost in the growth of the city.

In 1927 the Ulrickson Committee prepared a report which was more of a capital expenditure program than a complete city plan. In this report additional local parks and playgrounds were recommended, as well as a circle of major parks about the city, connected by boulevards and parkways, but no definite suggestions for locations were made.

In 1939 my firm, Hare and Hare, was employed as consultants to the Park Board of Dallas, to prepare a master plan for parks, as well as to design individual park areas. In 1942, two reports were completed, one dealing with a system of connecting parkways and boulevards in the metropolitan district, and the other covering local parks, playgrounds and playfields within the corporate limits of Dallas. These two reports, including an extension of the study of local park areas to include the metropolitan district, have been coordinated with the other recommendations of the city plan, such as schools, and included in the present Master Plan Report.

At the present time the park system of Dallas has expanded to more than sixty parks, in addition to some two hundred small circles, triangles and esplanades. The total park area is now approximately 4,500 acres, which does not include about 850 acres of outlying farm land under control of the Park Department, which may, at some future time, be used for park purposes. Adjacent suburban communities of the metropolitan district have also acquired sixteen park lands, in addition to triangles and esplanades. However, the area of these is small, totaling about 100 acres, and these cities depend largely upon Dallas for the enjoyment of larger natural park areas.

The Master Park Plan provides for a comprehensive system of parks, parkways and play areas to serve all sections of the community and the

various social and racial groups. Particular attention has been given to active recreational facilities, including play lots for smaller children, playgrounds for children of elementary school age, and playfields for older children and adults.

Play lots are recommended primarily for the more congested districts, where individual yards are not available for pre-school children.

Playgrounds have been located adjacent to or consolidated with the school grounds whenever possible, but additional separate areas have been provided where necessary to give complete coverage. A maximum walking distance of one-half mile, as well as density of population in the vicinity, have been considered in determining the spacing and location of future playgrounds. The size is also related to the population served, but a minimum of five acres has been the aim.

Playfields, either in connection with Junior and Senior High Schools, or in connection with playgrounds or neighborhood parks, have been spaced on a radius of approximately one mile, or in other words about two miles apart, depending on the population density. A minimum area of ten acres, but preferably fifteen or twenty, has been the desirable standard adopted.

Dallas is more fortunate than many cities in having a reasonable distribution of local park areas in the built-up sections. Also there has been closer cooperation in the past between the Park and School Departments than is often found.

Other types of parks included in the complete system are small ornamental squares, neighborhood parks, large parks, parkways and reservations.

Dallas has a great number of small, ornamental triangles, squares and esplanades under the control of the Park Department. Most important of these is Dealey Plaza, named for the late Mr. George B. Dealey, that kindly and universally loved gentleman, who was often called the father of planning in Dallas and whose recent death is a great loss to the city. This park not only provides an inviting highway entrance to the city, but a point of interest as seen from incoming railroad trains.

The picturesque topography and native trees furnish many opportunities for the preservation of small areas of natural beauty in neighborhood parks. These neighborhood areas, besides providing passive types of recreation, can often include active playground or playfield facilities. Lake Cliff Park, in the Oak Cliff section of the city, is perhaps one of the finest examples of a neighborhood park in the country.

White Rock Park, with more than 2,300 acres of land and water, is the largest unit in the system, and the center of picnicking and water sports. Other large parks include Kiest Park of 250 acres on the southwest, a generous gift from the late Mr. E. J. Kiest; Bachman Lake Park of 600 acres on the northwest; Tenison Park, 160 acres and Stevens Park, 140 acres, both given over largely to golf; Samuell Park, 100 acres, a more

recent acquisition through bequest, now in the process of being planned; and Fair Park of 180 acres, the seat of the Texas State Fair over several decades, and in 1936 the site of the Texas Centennial Central Exposition. A considerable expansion and redesign of this park is now in contemplation.

One of the scenic assets of Dallas is Turtle Creek Parkway. The topography of the region provides a number of other equally fine and much more extensive opportunities for parkways, preserving the natural beauty of stream valleys and protecting these water courses in public ownership. The valley of White Rock Creek, Coombs Creek, Cedar Creek, Five Mile Creek, and the Elm Fork of the Trinity River, as well as a number of smaller tributaries, are included in the master park plan.

While Dallas has a number of fairly large parks, in addition to the extensive area at White Rock Lake, they are all rather intensively used. In order to provide the types of recreation directly related to the enjoyment of undisturbed natural scenery, four large reservations are recommended to serve the metropolitan area: one in the low land west of Bachman Lake Park to the northwest of the city; one in upper White Rock Valley on the northeast; one including rock ledges and cedar groves to the east; and one on the escarpment to the southwest. It is proposed that these reservations should have the minimum of roads and structures to make them accessible and useful.

On the basis of the generally accepted standard of one acre per one hundred population, the Dallas Metropolitan District, with a present population of over 400,000, has at present an ample acreage of park land. However, because of lack of local recreational areas in certain neighborhoods, and looking forward to an estimated regional population of nearly 700,000 by 1970 (and making allowance for the large water area of White Rock Lake), considerable additional land should be added while the opportunity exists. The report recommends approximately 500 to 600 acres in additional playgrounds, playfields, and neighborhood parks; about 4,000 to 5,000 acres in parkways; and about 2,500 to 3,000 acres in reservations. This brings the future total, including present park land, to 12,000 or 13,000 acres. However, the preponderance of this acreage will be in large natural reservations and outside parkways with low maintenance cost. The additional acreage above normal standards is well justified on the same basis as the 40,000 acres or more of Cook County Forest Preserves, which are in addition to the parks within the city of Chicago.

Perhaps the most important part of this story of planning is the accomplishment to date. The Master Park Plan for Dallas, while a long-range program, is already in the process of realization. Since the inception of the plan six years ago, six new parks totaling 100 acres have been acquired, ten existing areas in various sections of the city have been enlarged to the extent of 45 acres and some sites have been ten-

tatively reserved in the plats of new subdivisions, all as shown on the Master Plan. Special attention has been given to the pressing needs of the negro population, in order to provide suitable recreational areas within their various neighborhoods. Of the six negro parks already established, one site in a central location, Griggs Park, is being enlarged at great expense. A smaller addition has been made to one other, and three new sites have been acquired. In addition to land acquisitions much development is either completed, under way or under contract. These activities include two swimming pools, four junior pools, five tennis courts, seven lighted softball diamonds and much general landscape development such as Dealey Plaza, the rose garden at Lake Cliff and redesign of Lee Park. Thus, Dallas is not only planning in accordance with its past tradition but is making tangible progress toward the realization of those plans.

Public Housing in Dallas

JAMES L. STEPHENSON, Executive Director, The Housing Authority of the City of Dallas

THE public housing program in Dallas, and the success it has attained, is the result of the foresightedness and planning of its city officials and cooperation of civic leaders.

In 1938 it was recognized officially by the City Council that there existed in the City of Dallas slum areas that should be cleared and that there was a shortage of safe and sanitary dwelling accommodations available to families of low income at rentals they could afford. The Council established The Housing Authority of the City of Dallas, pursuant to the Housing Authorities Law of Texas, for the purpose of clearing those areas dangerous to the safety, health and welfare of the community and providing decent, safe and sanitary housing for underprivileged families.

A general survey of housing conditions was made by the City of Dallas to determine the need and market for low-rent housing in our city. The survey was conducted under the supervision of the City Plan Engineer's office, with assistance from the Departments of Health and Fire, as well as other divisions of the City Government. The survey showed that some areas were substandard due to the character of the structures as well as to the physical status of the neighborhood; other areas, which could not as a whole be regarded as substandard, had poor structures and poor living conditions, which made them a blot upon the neighborhood in which they were located.

As a result of these substandard conditions, there was a *Health Menace* due to lack of elementary sanitary facilities, baths, toilets, and in many instances, water supply; lack of sufficient area in rooms; lack of

air and sunlight caused by insufficient window space and the crowding of buildings against each other; poor state of repair of dwellings, such as leaky roofs, sagging floors, windows and doors broken or boarded up; *Fire Hazard* due to crowding of buildings largely of cheap frame construction; *Welfare* of the inhabitants impaired due to lack of privacy caused by improper arrangement and use of rooms; children of all ages and both sexes sleeping in the same room or with their parents; poorly kept premises; and the presence of undesirable business activities.

The report stated that "Fire hazards in these areas endanger the entire city. The insanitary conditions in the areas threaten the lives and health of the people as a whole, especially in the event of an epidemic."

As we all know, there is no effective barrier in neighborhood markings to prevent germs crossing those lines. Servants living in slum and substandard neighborhoods, which disseminate contagious diseases, go to the homes of the more prosperous of our citizenry and come in contact with the children of those families. Health surveys were made, establishing the fact that the greatest amount of disease—tuberculosis, cancer, syphilis—was to be found in these slum areas. It was also found that the greatest number of fire and police calls, as well as cases of juvenile delinquency, emanated in these areas.

Slums have long been a serious drain upon our civic pocketbook. It would be a serious mistake to assume that all the excessive costs of slum areas to the community are due to bad housing conditions, but none the less bad housing is certainly a strong contender for first place among the causes of chronic waste which no far-sighted and realistic city can afford to tolerate. It is wasteful as well as shameful to allow blighted areas to exist in any modern town or city. Fire, disease, delinquency, crime are serious and to a great extent unnecessary leaks in the municipal budget. Taxes for the costs of policing, health and other municipal services fall doubly upon prosperous areas because the poorer sections cannot bear their share.

The 1940 Census of the United States bore out the findings of the housing survey made by the city, that out of a total of 89,512 dwellings in the city limits of Dallas there were 25,120 needing major repairs or lacking private sanitary facilities.

Having established the need for the functioning of the Housing Authority, the sites were selected after careful investigation and study by city officials and representatives of the Housing Authority.

The construction of the housing projects in Dallas was delayed almost a year, due to an injunction suit having been brought to restrain the Authority from exercising the right of eminent domain in acquiring the site for our first development, one for Negroes. This resulted in a suit to test the constitutionality of the Housing Authorities Law of Texas, and was carried to the Supreme Court, where the constitutionality of that law was upheld.

Dallas had the first low-rent public housing project west of the Mississippi River. Before the U. S. Housing Act of 1937 was passed, to test the feasibility of the then proposed housing program, 51 demonstration centers were built throughout the United States by the Public Works Administration. Cedar Springs Place, on Lucas Drive in Dallas, is a PWA Project of 181 family dwelling units which went into management in the fall of 1937. It is owned by the Federal Public Housing Authority and leased to this Authority for operation.

We have five permanent low-rent housing projects built with the assistance of the Federal Public Housing Authority, totaling 1,569 family dwelling units—748 for white families, 102 for Latin-Americans, and 900 for Negroes. At the completion of the Negro and Latin-American projects, they went into management as low-rent housing projects for families of low income then residing in substandard housing. At the completion of the two white projects, due to the national emergency and the critical housing shortage resulting from the migration of families to Dallas to work in vital war industries and the transfer of the Eighth Service Command from San Antonio to Dallas, the Army and War Manpower Commission requested that these two white projects be made available to essential war workers and military personnel. This was done at a higher rental schedule and income limitation of $2,900, with the further provision that military personnel above the rank of Captain in the Army and Lieutenant senior grade in the Navy would be ineligible. These two projects will be reconverted to low-income as soon as it is possible for the present residents to find adequate housing elsewhere.

In addition, we are operating under lease agreement with the Federal Government, 2,681 temporary prefabricated war housing units erected for the housing of essential war workers and military personnel. Following V-J Day, the eligibility requirements were changed whereby only veterans of World War II and military personnel may be housed in all of the war housing projects.

We are now in the process of erecting 516 Quonset hut units for the housing of veterans under Title V Housing Program. These are only temporary dwellings erected to take care of an emergency situation, and will be eliminated as soon as adequate housing is available.

The housing situation in Dallas was indeed critical during the war, but the present housing shortage is far more desperate. During the war the population of Dallas, according to Chamber of Commerce estimates, increased from 325,000 in metropolitan Dallas to approximately 500,000. Many of these people came to Dallas to work in the war plants and, following the termination of the war work, stayed on, being absorbed by local civilian industry. Now that the thousands of men and boys who have been fighting overseas are returning to Dallas, trying to get their families together, we are faced with a housing dilemma far worse than we ever imagined.

As of April 1, we had 9,908 active applications on hand, the majority of which were from veterans. By active applications, we mean applications placed in the previous three months or where the applicant has contacted us during that period indicating he still has a need for housing. In March, out of 4,431 apartments, only 116 were vacated, so we can take care of only a very small number of those applying. We are housing at this time only veterans with children, and hundreds of couples who are desirous of placing an application are turned away.

In the low-rent projects, we take these people from poor living conditions and put them in decent, safe and sanitary homes. But our job is not finished there. One of the Management's most important functions is to provide an educational and recreation program to improve further the standards of living of the residents. It has been proved clearly by the developments of the Dallas Housing Authority that public housing is more than brick and mortar; of even greater importance, it is the means of directing people to higher standards of housekeeping and social conduct. It is definitely the most practical means, through the creation of better environment, of solving definite social problems.

To achieve this community program of social, recreation, health, education and welfare activities, buildings, play areas and equipment are furnished by the Authority, and professional leadership is furnished by such agencies as the Dallas Board of Education, State Board of Vocational Education, City Health Department, the City of Dallas through its Recreation Department, and other civic-minded organizations.

In true democratic fashion, the program must be provided only *to create an opportunity* for adequate satisfaction of the needs. While guidance and stimulation of community activities are essential, we must renounce paternalism as a guide to action for Management. These advantages are *not limited* to the persons residing in the projects, but are available to the community.

The housing developments have proved to be radiation centers for the whole populace around the projects. Public subsidized housing may well serve to establish the nucleus in certain areas and neighborhoods by stabilizing real estate values around which private interests can build and extend their work of redevelopment and rehabilitation. The clearance of slum sites and their redevelopment with appropriate housing immediately starts in motion progressive influences that should cut the city expenses and thereby lower the taxes. The elimination of bad housing and bad neighborhoods reduces city expenses at a comparatively insignificant loss of immediate revenue. Taxable values are restored to adjacent neighborhoods. Properly planned public housing projects, strategically placed, can open the way for private builders to start the most comprehensive program for the reconstruction of sites ever taken and to offer the building industry the greatest opportunity for stable profitable employment ever known.

In our city, like most cities, our housing structures are now at their lowest state of repair because of the lack of available materials and the manpower with which to keep them up. Construction of new homes was only about 10 percent of normal during the depression years, and there is today a high shortage of decently maintained homes. The shifting of population to urban areas, the return of servicemen, the new families, the need for employment, combined with the need for homes following V-J Day makes a large home building program imperative. However, if the building boom is to mean only the erection of homes in outlying sections and in suburban communities and the loss of city population because of lack of building space now occupied by substandard dwellings, then the loss to the city of its population and the loss of the revenue resources of that class of population will be irretrievable.

Good planning is the gateway to better housing, and with a well-planned and coordinated program we can rehabilitate the substandard areas in our city and provide our families with homes that reflect our conception of American living standards.

Dallas is fortunate in having secured the services of one of the Nation's most outstanding city planners, Harland Bartholomew, and the Master City Plan to guide the development of Dallas for the next few decades has now been completed. In his overall report, Mr. Bartholomew states:

> The improvement of housing conditions was usually included as part of many of the early comprehensive city plans. Because of the lack of public interest and understanding, not much was done to improve housing conditions in American cities until recently. The Federally-aided low-cost housing programs undertaken in several hundred American cities during the past ten years has stimulated unusual interest in the matter of all forms of housing. Most of the larger American cities have areas of obsolete houses, sometimes badly overcrowded and usually lacking in adequate sanitary conveniences. Dallas is not without such areas. The elimination of these slums must be an important consideration in the development of The Master Plan.

It is not possible for the Housing Authority with the aid of the Federal Government to eliminate all of the blighted areas in Dallas. Private capital must be enlisted for a concerted and effective attack. The means of accomplishing this purpose is provided by the Wagner-Ellender-Taft Housing Bill. You doubtless are familiar with the Urban Redevelopment feature of this bill, which sets forth a 5-year program to enable cities to clear slums and prepare the land for redevelopment in accordance with a master plan of the city. The land would be made available to private enterprise at its use value. Federal aid under this plan extends only to the acquisition and preparation of the land, after which it is turned over to private interests for development.

In closing, I wish to emphasize that public housing is not competing with private enterprise. One of the main purposes of the housing program is to "up" the standard of building homes by private capital. Home

ownership is the backbone of democracy; and we hope by taking families from the slums, giving them a chance to live in a decent human dwelling and instilling in them community pride and civic well-being, public housing will be the stepping stone from the slums to modern home ownership.

Improvement of Small Texas Towns

MAME ROBERTS, Chairman Civic Planning—Little Towns, Howe, Texas

BACK of the majestic skylines of our great cities are other skylines, less majestic, perhaps, but not less important: An irregular outline of buildings that stopped growing before they reached the skyscraper stage—a church spire, a steeple bell, and in the background white cottages with red roses—*the skylines of the little towns.*

In this new world era, these skylines are coming more and more into the vision of the future. With a trend toward decentralization of population and wealth for security reasons, this is an era of opportunity for the *Little Towns.* Eyes are turning, hearts are yearning toward freedom in living.

We have so many little Texas towns. We are everywhere. We cover the State. We are holding our heads high these days. WE, too, have a *Master Plan.* Our Master Plan was not drawn by a million-dollar architect or master planner; it grew out of the hearts of the little towns themselves—their needs.

The development of this master plan does not call for the expenditure of millions of dollars, but it does call for the expenditure of millions of individual efforts—the united efforts of every man, woman, and child, in every little town.

The Objectives of Our Master Plan are Definite:

First, *Preservation of Life Itself.*

I shall pass over the years of economic ills which drained our life's blood—I shall pass over the pitying stories which have been written about our *Deplorable Condition.* We have been called everything from "Orphans in an unfriendly world, despised, neglected," to "Drab places in which streets and buildings are down at the heels, and culture, sterile." We have been called "blots" on Texas' beautiful landscape.

Second, *Cleanliness, Beauty, Recreation, Cultural and Industrial Development.*

Third, *to help make Texas better and more beautiful*—to make Texas the cleanest, the most healthful, the most beautiful State in our Nation.

Our plan is big enough and broad enough to reach the needs of every town—even the smallest, the dirtiest, the ugliest, the poorest, the most isolated—if it has the *Will To Do.*

Strange as it may seem, every little Texas town has some particular advantage—or some individual asset, which if developed, would make

that town outstanding. Maybe it is some natural beauty, some natural resource—or maybe that little town could be just the *cleanest* town. We are recognizing our opportunity; we are listing our assets—we are taking what we have and making the most of it. We are not forgetting, for one minute, that cleanliness and sanitation are basic requirements in town improvement.

State-wide interest in the plan was aroused by a series of articles published in the *Dallas Morning News* which appealed to every town in Texas to clean up and dress up. This series of articles gave suggestions for organization and outlined practical plans to promote the work. Interest was so great that a crusade for cleanliness and beauty for every Texas town developed and spread with amazing rapidity to every section of the State. The work is supported by the strongest forces in Texas: the press, the Texas Highway Department; the regional chamber of commerce, garden clubs, federated clubs; men's service clubs, religious and fraternal organizations; and newly organized civic groups.

We are incorporating in our plan the planting of Living Memorials in honor of our great Texas soldiers. This plan is sponsored by the Texas Highway Department. H. W. Morelock, of the little town of Alpine, gave us this beautiful inspiration. He said: "If our soldiers who made the supreme sacrifice on the world's battle fields could speak to us today, they would say—Build for us only such monuments as will keep alive in the hearts of all the cause for which we died. *A public park* with stalwart trees stretching heavenward; *flower gardens* bursting into bloom when spring blows her clarion trumpet over the dreaming earth; *community centers* that will tend to rob tragedy of its horrors and condition youth for a greater tomorrow: a *living monument* in *every hamlet*. . . ."

There is another phase to this Living Memorial Planting Plan which is unique and limitless in both possibilities and results. It involves two simple steps, first, the selection, by each county, of a hardy tree or flowering shrub; second, the planting of the county's selection in the yard of every home, at the entrances of the towns and cities, on grounds of public buildings, so that each county may be a unit of harmonious beauty when the planting is completed.

I wish you could have gone with me to the many Texas towns which I have visited and have talked as I have, with a cross-section of the population, interested in building better towns, building for a safer, better future, for the health, happiness and prosperity of the fine citizenry of the great State of TEXAS.

We are mobilizing for Peace:

Peace is like a garden; it must be tended and nurtured. We must recognize the requirements and apply tested knowledge and sound judgment, with faith and good will that will last through the years. Ours is the challenging privilege of helping to build a better and a more beautiful Texas, a better and a more beautiful world.

Reports of Discussion

RODNEY GIBSON, City Planner, Omaha, Nebr., *Leader*
C. C. FORD, Ass't City Plan Engineer, Dallas, Texas, *Reporter*

THE following is a resume of the discussion period covering the following listed addresses:

1. Dallas Plans Again: Hon. Woodall Rodgers, Mayor of Dallas
2. Public Parks in Dallas: S. Herbert Hare, City Planner, Kansas City, Mo.
3. Public Housing in Dallas: J. L. Stephenson, Executive Secretary, Dallas Housing Authority.
4. Improvement of Small Texas Towns: Miss Mame Roberts, Chairman, Civic Planning Committee, Texas State Federation of Women's Clubs, Howe, Texas.

Rodney Gibson, City Plan Engineer of Omaha, Nebraska, pinch-hitting for Nathan Adams as discussion leader for the morning session, opened the informal period by summarizing the addresses delivered. His sincere animation instilled high interest into the delegates to participate in the discussion period.

He lauded Mayor Rodgers as one of the country's outstanding Mayors who has unlimited enthusiasm for civic improvements. Mr. Gibson also praised the city's Action Committee of One Hundred, as outlined by the Mayor in his speech, as glamorizing City Planning to insure its fulfillment, and asserted that the evidence shows Mayor Rodgers has the formula on "know how" and the delegates would well profit to get carbon copies!

Delving into housing and parks, the discussion leader offered the City of Omaha's solution on housing. They are constructing emergency housing on the sites of the City Parks throughout the city, but added that Mr. Hare might not give them his blessings. Omaha's original city plan was drawn by Mr. Bartholomew in 1916 and this same plan is the guide post for the present city development of Omaha. Dallas is also following a city plan executed by Mr. Bartholomew.

Mayor J. C. Trahan of Texas City, Texas, was the first delegate to open the discussion. He asked Mayor Rodgers how the financing of the Municipal Improvement Program was cared for and how the seventy-five cent figure for cost of poor planning was reached.

Returning to the microphone, eyes twinkling, Mayor Rodgers thanked the Mayor of Texas City for those questions. He explained, "The City of Dallas has been fortunate in issuing some bonds for civic improvements at a low rate of interest so far as carrying these bonds at an interest rate of .8 percent to 1.25 percent. The recent $40,000,000 bond issue which was approved by a vote of the citizens of Dallas has not caused the levy of any special taxes to carry out the City Improvement Program as outlined by the present Master Plan."

He went on to explain that this $60,000,000 bond issue consists of a ten-year improvement program for the city. The projects for this program include the construction of a Municipal Center for a Colliseum, Public Library, new City Hall, street widening, sanitary and storm sewers, as well as a large extension of the City's Water System. He added that the City of Dallas has annexed within the first year approximately forty square miles in territory, almost doubling the territory of Dallas. This increase, he asserted, created the need of extending the city's utilities and services.

Mayor Rodgers further explained that the seventy-five cents out of every dollar spent on public improvements was wasted because of lack of early planning. The Mayor gave several examples such as the Akard Street widening located between Commerce and Jackson. This cost $1,000,000 and even at the huge expenditure, the street still has a "dog leg" in it which hampers traffic. Which only goes to show the "proof of the pudding is in the eating" because had these streets originally been planned properly, the cost would have been less than $100 for planning. The appearance of the city would have been greatly improved—not to mention the effect it would have had on the impaired flow of traffic it causes today. Another example he told was the cost for expanding Love Field to care for the air traffic and air industry in the Love Field Airport. For instance, this land now costs $2,000 an acre, but had this land been purchased at the time Love Field was originally laid out, it would only have cost between one hundred to two hundred dollars per acre. He finished by saying the negligence in planning is now costing the citizens of Dallas many precious dollars to cut their way out of existing situations, so that the City of Dallas may have the facilities required by a city of this size.

"Mayor Rodgers, what authority will your Action Committee have in regard to carrying out of the Master Plan of Dallas?" asked Mr. Judd of Oklahoma City. The answer was that the Action Committee will have no legal authority other than carrying out the wishes of the people and in keeping the planning problems before the people at all times and to advise the city officials of proper procedure for development in accordance with the Master Plan. In answer to Mr. Judd's question on how the financing of these bonds could be carried out without the levying of special taxes, Mayor Rodgers explained the statutes of the state of Texas limit a municipality to an indebtedness of $50,000,000. Prior to the $40,000,000 issue the City of Dallas was retiring $100,000 of its indebtedness in and above its yearly expenditures. However, due to the fact that Dallas has nearly doubled, this necessitates many municipal improvements. Dallas has not constructed a municipal building for the last twenty-five years. Mayor Rodgers elaborated by saying although it is necessary for any city to have a low tax rate, it is also recognized that a city must have the facilities required for an efficiently operated

city. Last year the tax rate in Dallas was increased from 54 to 65 percent. This rate was based on the 1935 property value instead of the present-day inflated values.

At present, Dallas is the twelfth lowest of fifty comparable cities throughout the United States on Tax Rates. Cities cannot have their cake and eat it too. The city of Dallas is the center of activity and has more possibility for development than any other city in the United States due to its geographical location and through proper planning and development plans. The citizens of this city have indicated their willingness to support and accomplish this in their recent voting of the $40,000,000 bond issue.

Mayor Murphy of Newark, New Jersey, inquired how city street improvements were paid for; whether or not it was taken care of through local or general assessment. He was advised that the initial payment of any street is assessed on the property owners with the exception of intersections and these are paid for by the city. The maintenance of the city streets is taken care of through the general assessment or general fund of the city. Mr. Murphy also wanted to know what authority or what state statute provided the authority of the action of the City Planning Commission. He was told that the City Planning Commission was only a recommending body to the City Council and that the City Council had the final action and at the present time the state laws do not provide the City Planning Commission with such authority. However, this type of authority was recommended by Mr. Bartholomew to secure the necessary state legislature in order that the various planning boards would have legal authority in carrying out and approving all necessary action relative to civic improvement plans.

A question was asked how to appoint plan commissions or boards in small towns. Miss Roberts explained that each town settled its own planning problems in securing money and organizing plan commissions or boards for carrying out of any planning. There are some small towns that organized a $1.00 a year club in which each member donated $1.00. Through a large membership in such a club, a sufficiently large sum can be acquired to initiate plans. In many cases donations augmented the sum or the original membership fees.

A delegate from Mississippi inquired if she were finding any difficulty with the word "planning" in discussing these problems in small towns. She advised the group that the terminology of planning was referred to as civic improvements rather than planning and added that she had not experienced any difficulty. She reminded the delegates that small towns are the backbone of the States and should have the attention of all of us.

Administrative Planning Policy and Practice

MAJOR GENERAL U. S. GRANT, 3rd, Chairman National Capital Park and Planning Commission and 1st Vice-President, American Planning and Civic Association, Washington, D. C.

AN ADDRESS TO THE OKLAHOMA CITY CHAMBER OF COMMERCE, AT THE COMMUNITY PLANNING CLINIC, APRIL 20, 1946

TO BEGIN with, it seems necessary to define what city planning is and the physical form which the city plan itself must take. I like best the definition given by the City Manager of Kansas City, Mo., in his report of February 8, 1943, to the City Council.

> Planning is the physical synchronization of social and economic forces. That means land-use surveys and social surveys showing where people live, where they work and how they get to work. . . . It is not magnificent boulevards, large parks, stately public buildings or fine terminal facilities alone which make the city, but the housing, comfort and health of each and every resident.

In fact, in the fewest possible words, the essence of our thought is stated in the title of Mr. Henry S. Churchill's recent book, namely "The City Is The People." City planning must therefore take into full consideration the economic, utilitarian and cultural needs of the population.

While we speak of a master plan because such an initial general presentation of what ought to be done is essential as a basis for more detailed studies and adjustments between conflicting interests and to changing circumstances, even this initial master plan cannot possibly be complete in one map. Manifestly a series of maps will be necessary in order to present all the elements of the plan even in their essential characteristics without detail. It is necessary to remember that the city plan must itself be a living and constantly developing presentation of the needs and intentions of a constantly changing and developing community. We must think of the city plan, therefore, not as something fixed, but as something that is constantly being changed and revised. For this reason in the Act establishing our National Capital Park and Planning Commission in Washington the term Master Plan, which has an unfortunate connotation of something that can be once and for all completed and fixed, has been avoided, and the Commission's primary function is to prepare and maintain a comprehensive, coordinated and consistent plan for the National Capital and its environs.

Too often city planning is thought of as city beautification. This again is a misapprehension to be avoided. However, there should always result from good planning a sense of order, harmony and functional perfection, a feeling of satisfaction, and beauty will have been achieved thereby. But beauty as a product of decorative art, is no part of city planning.

An old Persian proverb tells us that: "Thinking well is wise; planning well, wiser; doing well, wisest and best of all." It is indeed essential to plan well but the planning agency must have and feel a responsibility for securing the physical execution of its plan. Consequently it becomes axiomatic in our type of Government that the city plan must have popular support and loyal administrative backing, especially that of the government agencies charged with the construction projects and fiscal control.

To secure such support a certain amount of educational and explanatory propaganda must emanate from the planning agency; but this is not enough. To hold public confidence the plan must be sound and generally the planning commission must be found to have been right. Its recommendations must, therefore, be wise and practical; it cannot afford to withdraw into an ivory tower by itself and produce merely ideal plans, however perfect technically.

Each element of the plan must necessarily be an adjustment between conflicting interests, sometimes even a choice of evils, but always sensible and ultimately economical. The city plan must foresee, several years beyond the possibility of execution, which means years in advance of any financing program, the needs of the community and the best potential solution or solutions. We must remember the warning of Mr. Chester I. Barnard, President of the New Jersey Bell Telephone Company, that: "Nearly all foresight involves a *certain present* loss for a possible and *uncertain future* gain."

In order to secure this essential cooperation, it is necessary:

(1) that there be constant contact and frequent exchange of views with the constructing agencies, and full mutual understanding with the fiscal agencies as to the foreseeable availability of funds and as to policies governing priorities in their expenditure;

(2) that sympathetic understanding and close cooperation of the City Council be secured and maintained. It will be necessary for the City Council to practice George Washington's principle, as stated in his letter of June 1, 1799, about our Federal city: "It has always been my invariable opinion, and remains still to be so, that no departure from the engraved plan of the city ought to be allowed unless imperious necessity should require it, or some great public good is to be promoted thereby;"

(3) that complete correlation of the city plan be established and maintained with the zoning plan and modifications thereof;

(4) that the design of highways, streets, bridges and parking facilities be consistent with the overall plan;

(5) that subdivision plans be not accepted unless consistent with the overall plan;

(6) that public city transportation, railroads and water transportation be integrated with the city plan and never treated as independent problems;

(7) that the need for parks, recreation facilities, public land use, and educational facilities have an ever-increasing and growing importance in the development of our cities;

(8) that coördination in the development of suburban areas be secured. Because of divisions of political jurisdiction this may prove one of the most difficult results to achieve. Where such political boundaries exist, cooperation must be secured by negotiation and by creating a sense of community interest in the best development of the entire metropolitan area.

The question may be asked, how can a planning agency be constituted so as to provide within its membership the means of securing sound technical planning and at the same time obtaining cooperative and coordinated action? Many city planning commissions have been stultified and their usefulness blocked by their inability to secure the cooperation of established municipal authorities having definite legal responsibilities and discretionary powers. We think that in the constitution of our Commission, established by an Act of Congress approved April 30, 1926, a good practical solution of this problem has been achieved.

The Commission, therefore, consists of the heads of the principal constructing agencies in the city, two representatives of the Legislature (the Chairman of the Senate and House Committees on the District of Columbia), and "four eminent citizens well qualified and experienced in city planning." Thus the differences between technical requirements, and utilitarian and financial requirements can be argued and adjusted around the table within the Commission itself. Consequently in some 20 years, only twice has the Commission had to oppose a constructing agency on a major question before Congress.

It is our belief that in general the planning commission's authority should be advisory. It is certainly no part of general city planning to design public works, to take over any of the responsibilities or authority of the municipal agencies in regard to the design of their projects—provided their projects comply with certain general requirements of location, standards of construction, and capacity necessary to make them consistent with the general city plan and the overall best interests of the community. It will be found necessary to require approval of the planning commission to the designs of construction agencies only, where such approval is necessary to insure this coordination with the overall plan.

As an example, one problem is whether industry should be kept centralized, as it is in so many of our cities, or encouraged to disperse. The location and capacity of highways and changes in the zoning map will be obvious methods of securing compliance with whichever policy may be adopted.

Similarly the maintenance of real estate values and not only the prevention of further spread of blight but the actual redevelopment of blighted areas, are problems which today require the best efforts of our

planning agencies and of all other municipal authorities concerned with the city's well being. Indeed, deterioration of existing real estate values is the chief harmful change now affecting our cities, including decentralization of previously established high values and the gradual blighting of both large commercial and residential sections. All cities are suffering from this type of deterioration, and other causes of municipal worries are mostly but symptoms of contributing factors to this primary disease.

This municipal disease is inextricably connected with the greatly increased cost of safe, sanitary and decent housing. In 1942 half the families in the United States earned less than $2,000 a year; 35 percent less than $1,500. FHA's Division of Research and Statistics showed only 1.5 percent of the new houses built in 1942 with its guaranteed loans, as being within the income of 35 percent of the population; only 19.6 percent were within reach of half the population; while 1.5 percent of the existing homes purchased in 1942 with FHA guaranteed loans, were within the means of 35 percent of the population and only 15.5 percent within that of half the population. This discrepancy in the law of supply and demand occurred during a period when homes for industrial workers were especially stressed. Owing to further rises in building costs and the unexpectedly large number of new families being formed as a result of the war, the situation is much more serious today than it was four years ago.

A word as to the causes of depreciation of real estate values may be permitted me here.

(1) Changes in transportation, because of which in 25 years the radius of convenient travel from home to work and back again has changed roughly from 5 miles to 15 miles, making the area served jump in proportion from 25 to 225 square miles.

(2) The increasing cost of dwelling construction has forced a search for cheap land made accessible by this improvement in transportation. Consequently, there has been a movement from previously valuable central areas to the outskirts and a corresponding depreciation of values in the central area.

(3) Of course the vacated houses, whether dwellings or commercial, are likely to be occupied by less prosperous business and people in the lower income groups. In order to secure some income from the property, harmful crowding occurs and the area becomes a slum. A slum is not only a part of the city that has depreciated and pays lower taxes but because of the disease, crime and bad citizenship which it engenders, it becomes a costly liability and must be carried by the remainder of the community.

(4) Intrusions of objectionable *improvements* by unwise manipulation of the zoning regulations is another cause of such deterioration of neighborhoods.

(5) Finally traffic congestion which makes the commercial and finan-

cial center of the city relatively inaccessible and usable only at great inconvenience to the public, is a recognized cause of decentralization of the highly taxed business area especially.

I will not attempt to discuss the cures for this modern municipal disease. Some of them may be mentioned, however, in order that it will not be thought there is no remedy and in order that it may be clear that there is no single remedy and that a number of remedies must be applied simultaneously.

First of all there is urban redevelopment of the blighted and slum areas, by which it is proposed to make it possible to rebuild these decaying and harmful communities into well-balanced and prosperous neighborhoods. The Wagner-Ellender-Taft bill, S. 1592 proposes to give Federal aid to private enterprise to build more inexpensive dwelling houses, and to give Federal aid to the municipalities to acquire the slum and blighted areas for redevelopment.

Another remedy would be an improvement of traffic conditions; this must include aid to the improvement of public transportation, together with the provision of favored highways and streets for through traffic so as to remove it from interference with necessary local traffic in local business streets, and the development of off-street loading and parking facilities; but we must not forget that it will never be possible to provide such facilities sufficient for the private automobile, unless public transportation is so well developed as to compete successfully with the private automobile and keep the number down.

Finally we must recognize that our cities are naturally divided into communities. It is believed that this natural tendency can be advantageously stimulated and helped by sound planning and coordinated zoning, street construction and traffic control. In Washington, the Junior High School seems to be the nucleus of a natural residential community unit which, separated from other similar communities, should be as nearly self-sufficient as possible for residential purposes. That is, it should be complete with schools, recreation facilities, police and fire protection, local minor shopping facilities. It should be protected against through traffic by having the especially favored streets around its boundaries and it should be adequately and conveniently supplied with good public transportation.

In treating briefly such a large subject it has been necessary to speak in somewhat general terms and it has been impossible to treat any of the elements of city planning in the detail it deserves. I have, therefore, limited myself to suggesting in a general way certain of the outstanding problems and certain approaches by which they can be solved. These suggestions are offered in all humility, with the full realization that our cities are growing and changing so rapidly as to have prevented a definite and final establishment of the complete effectiveness of any of the cures proposed by city planners. It is my belief that the success

of the cure will depend very largely upon the wisdom and foresight with which it is applied, taking into consideration always the special local conditions and requirements. In other words, looking upon the planning commission as the city's doctor, the correct prescription will depend as much upon the physique and condition of the patient, as upon the particular virtue and reaction of the remedy.

The ultimate end for which we must all strive, planning commission, municipal authorities, and the good citizens of the city, is to join together now to make our city a good place to live in, to work in, to play in, and especially to bring up children in. Taking a thoroughly practical and unsentimental view, the one thing a city cannot afford is to have bad citizens and to lack the amenities of life, which the victorious American people now look upon as their right.

Zoning Round Table

PANEL: E. A. Wood, City Planning Engineer, Dallas, Texas; *Chairman*, Homer D. Grant, Planning Commission, Lubbock, Texas; Floyd M. Jennings, City Planning Director, Grand Rapids, Mich.; George H. Smeath; Gabriel C. Harman, *Reporter*.

THE discussion first centered on the difficulties of obtaining *county zoning ordinances*. It was thought they were often too elaborate, that one county patterned too closely after another, that the provisions of the ordinance are often not understood by the voters, that unconstitutional provisions are sometimes incorporated, that there is seldom sufficient publicity, that the public discovers apparent discriminations and that often unsatisfactory ordinances result from the willingness to compromise on the first ordinance with the idea of amending later.

Mr. Smeath stated that the Salt Lake County zoning failed because the ordinance was felt to be too elaborate and that it had all the faults listed above. If county zoning ordinances are to be secured, the farmers must be fully informed.

Proposed *conversion districts* have brought a new factor into zoning. The trend is being reflected in zoning practice under which old and large dwellings in "A" Districts may be converted to provide 1,000 to 5,000 square feet per single family, 4,000 square feet for six-family dwellings. Offstreet parking requirements are included in several cities reporting. In Shreveport, Mr. Andrews reported that 75 percent of the property owners in the block (and conversion is usually block by block) must approve requests for conversion from "A" to "B" uses. In the new Dallas ordinance, new apartments are allowed if 46 percent of existing dwellings are duplexes or multi-family structures. Mr. Kingery of Chicago and Cook County said that he felt that the owner-opinion method for basing action in conversion cases is frought with danger, due to the owners' unusual interest in old homes which overlooks the long-term planning program. It was pointed out that reconverted houses provide no in-

creased tax return. It was found in Grand Rapids that assessed valuation of properties in districts ripe for conversion is declining and reduction in taxes is being requested. In *conversion areas* reappraisals are often made and valuations raised. New occupants frequently do not maintain structures satisfactorily, back and side yard requirements prevent architectural changes. At the present time some of the highest rent characteristics are found in *conversion districts* and many of these characteristics are retained by allowing conversions.

On the question of *variances*, the Grand Rapids Board of Adjustment granted variances to almost anyone appealing because of hardship, such as loss of income. In response to an inquiry as to whether the Board of Adjustment has the power to change *use*, General Grant stated that the courts must decide. He thought that if the Board of Adjustment had the right to change types of use, it is usurping the right of the Zoning Commission. Major Wood maintained that the enabling act must show necessity for changes in use based upon statistics and that the legislative body should make changes only after a public hearing and after the planning commission has reviewed the facts. Grant of authority to the Zoning Board to change use from residential to business and vice-versa, inadequate notice of public hearings, and comparable actions weaken the effectiveness of zoning ordinances, impair property values and lose public respect for zoning.

In Grand Rapids, it was said, the zoning ordinance is considered an instrument for carrying out the plan and, as such, should not be dependent upon guesswork. A zoning plan should be revised periodically to reflect the city's growth. General Grant thought that in cities where zoning is new, the diagnosis of needs is subject to change. One failure of zoning is that the zoning commission often pays little attention to the original concept of zoning and makes changes under pressure.

In respect to what assurance there is that *zoning is a continuing process* which can reflect changing conditions, General Grant reported that "A" Residential Districts in the District of Columbia are being well maintained and that new areas are being zoned as they come in. The D.C. zoning ordinance is now being reappraised.

From the discussion it appeared that *state zoning enabling acts* did not generally permit cities to zone beyond the city limits. In Utah, it was reported by Mr. Smeath, a district beyond the city may be created for planning and zoning, and thus small areas adjacent to the city come under control.

Major Wood maintained that *zoning should definitely be related to the land-use plan.* Dallas is confronted with annexing large tracts of land, and, because of the slowness of public hearings, the city drafted a temporary zoning ordinance. When newly annexed, a new area is given "1-A" classification, until the plan commission can hold public hearings and act. A builder seeking a building permit after the area is annexed

applies to the city. The City Plan Commission must recommend use to the Council which acts. There is a new provision in the Dallas ordinance for landscaping commercial and industrial structures by deed restriction. Cleaners and dyers are restricted to commercial areas.

Mr. Bissell of Stockton, California, reported that its ordinance permits cleaning establishments in residential areas where not more than five persons are employed, but seasonal work and staff increases make enforcement difficult.

The Utah zoning ordinance proposes that the developer submit architect's plans to the City Plan Commission. If they meet the requirements of the ordinance, the plans are accepted. Control is lost, however, when architectural changes are made later.

During the war, *stores in commercial areas were sometimes used as living quarters.* This permission has been granted in many cities if adequate sanitation, light and other amenities are available. It was pointed out that the business zone is a lower use, so use of commercial areas as living quarters might under some circumstances be permitted.

Washaterias, it was said, were usually confined to retail commercial districts. However, Shreveport does not permit laundries of any size and number of employees in retail commercial districts.

Quick-freeze lockers and their use, it was thought, border on industrial use.

The duties and responsibilities of *Boards of Adjustment* should be more clearly defined in new and revised ordinances. The tendency is toward limitation. Courts are indicating that they believe planning legislation is not sufficiently comprehensive because non-conforming uses are not excluded. In some instances non-conforming uses are being handled by Boards of Adjustment. In Stockton, California, absence of any specific provisions to the contrary is considered sufficient authority for the Board of Adjustment to proceed. *There have been no variances granted in fifteen years.*

General Grant reported that in the District of Columbia the powers of the Board of Adjustment are fixed by the Zoning Commission. The Dallas ordinance empowers the Board of Adjustment to permit parking in a less restricted district. The Board hears the case and grants power to park. This is not a variance.

Mr. Kingery reported that in the Zoning Ordinance of Cook County, 10,000 square feet per single family was required.

So far as *non-conforming uses* are concerned, zoning was not considered to have fulfilled its purpose. In New Orleans, non-conforming users were given until 1945 to comply, but, due to the war, the time for compliance was extended. It would seem that the courts look with favor on prohibiting non-conforming uses. Mr. Bartholomew stated that in one ordinance non-conforming users were given ten years to comply. Mr. Kingery stated that Chicago gives different lengths of time, based on

kind of structure and investment. Major Wood said that in Dallas boarding houses in residence districts were given one year as compared with business which was limited to ten years. Mr. Kingery reported that Illinois state law legalizes requirements of zoning ordinances against non-conforming uses.

Mr. Hinton of Oklahoma City reported that the Board of Adjustment had allowed a business building in a residential section. The case went to the District Court and then to the Supreme Court which held that the exception by the Board was legal, but the building has never been built.

Major Wood pointed out that the Dallas Ordinance defines a boarding house—there must be five roomers before a residence becomes a boarding house. Mr. Eppich explained that in Denver Class "A" householders may rent two rooms to roomers.

Mr. Bartholomew called attention to the fact that courts can only pass on matters when presented to them.

In some instances a forty-year period is given for compliance with non-conforming uses provisions. Major Wood inquired, in the case of a cheap building, why wait forty years? Mr. Kingery said that he thought all non-conforming uses should be recorded, with photographs. Mr. Bartholomew stated that Washington gives a permit for non-conforming uses. Mr. Kingery thought this good practice, as it is a matter of record by the owner. Mr. Livingston suggested that the owner state the period for amortization, to be recorded in the Building Inspector's office.

Mr. Smeath of Utah observed that he had noticed *new homes in industrial districts*. In Ogden the zoning ordinance prohibits this. In Cleveland it was reported that there was a restriction against this. Mr. Smeath said that they used the argument that school boards could not be expected to provide school facilities in industrial districts. Mr. Bartholomew cited a case in which the court recently commented that the purpose of zoning is to bring together structures of like purpose. As to school facilities, Des Moines made a study and found that in river-bottom areas the cost of schools was three times that of schools for built-up residential areas.

Mass Transportation

JOHN L. WILSON, President, St. Louis Public Service Company, St. Louis, and President, American City Lines, Chicago

OF THE many problems that have developed during the urban expansion we shall discuss only one—mass transportation. I am going to make four definite statements, and give you my reasons to support each of them.

STATEMENT NUMBER ONE:

A good mass transportation system is the life blood of any city. An efficient transit system is one of the city's greatest assets.

Since I am more familiar with the city transit problems in St. Louis than with those of any other city in America, I shall use figures from the Greater St. Louis area to substantiate statement number one.

Recent traffic counts show that St. Louis Public Service Company transports 400,000 people to and from the downtown area on an average day. It requires 11,908 street car and bus trips to carry that army of workers and customers.

The St. Louis transit system, in the postwar period, is carrying 1,500,000 passengers on an average week day. Assuming that each person rides twice daily, this means that, in a single day, 750,000 individuals rely on our city transit system for their transportation. That figure is 61 percent of the population of Greater St. Louis.

The principal purpose of thoroughfares is to transport people. I think we'll all agree on that point. And the street that is used for city transit service as well as private vehicles, will transport more people and render more efficient service to the community. Why? Let us look at some facts.

An automobile, according to latest available statistics, carries an average of 1.75 persons. The average load on street cars and buses in St. Louis is 33 passengers. This figure is computed on the basis of midday and "owl" service as well as during rush hours. The rush-hour load of automobiles probably is no greater than during non-rush hours. Street cars and bus loads during rush hours will easily average double the 33 passengers per vehicle. And I think you will agree that efficient thoroughfares must be designed to meet the needs of peak periods. Each automobile is approximately sixteen feet long. Forty-passenger buses average 33 feet in length and a street car averages 50 feet from end to end.

Since the average load of street cars and buses is 33, or approximately 19 times greater than the average automobile, it is readily seen that an average city transit vehicle load of people, if all were in automobiles, would require some 300 feet of space; almost ten times the length of a 40-passenger bus, six times the length of an average street car.

On the basis of these figures, it is evident that people in street cars and buses require much less space in traffic lanes than do the same

number of people in automobiles. But that is only part of the story. For, as you probably have noticed, the statistics deal with all vehicles standing still and bumper to bumper. Folks who are in parked vehicles get nowhere.

The thing that counts is how many people can be moved past a given point in a period of time. This, of course, varies greatly with the speed of traffic flow as well as with the capacities of vehicles.

To give you a comparison of traffic on the move, let me quote some figures from the American Transit Association. They show a comparison of single lanes of traffic in congested areas.

Automobiles, on surface streets, will move 1,575 passengers an hour.

Buses, on the same thoroughfare, will transport 9,000 people an hour.

Street cars, on surface streets, can move 13,500 people an hour.

These statistics, as far as city transit service is concerned, are extremely conservative. I am not trying to paint a black picture for any form of transportation. Therefore, I have purposely given you what I consider minimum figures for transit vehicles.

There is more to this traffic problem than just transporting people For example, if any community were so shortsighted as to make no provision for city transit service, it would create another problem that already has proved so vexing that it defies solution. I mean the parking problem.

Consider these facts:

It requires 150 square feet of floor space to provide working room for each downtown employe in modern type office buildings.

Space needed for the storage of an automobile in the most modern type of ramp or elevator garage is approximately 240 square feet per car.

Crediting each vehicle with the average loading in city traffic of 1.75 persons, gives a car storage space requirement of 140 square feet of floor area per person.

It becomes apparent from these figures that to transport the daily working population into central areas by automobiles, would require garage storage space at least equivalent to the amount used for the conduct of business.

In other words, the man who goes to work by automobile requires just about twice as much downtown space as the man who travels by city transit.

In our modern civilization, city people must move. They must travel to and from their homes to their places of employment, to shopping areas, to recreational centers, to the homes of their friends. Three out of five Greater St. Louisans, 61 percent of our total population, take two trips by city transit service on an average day.

Therefore, I repeat: An A-No. 1 transit system is one of the city's greatest assets.

STATEMENT NUMBER TWO:

Cities and transit companies have many mutual problems that can be solved only through complete cooperation, and confidence in each other.

Transit systems and cities must discard the idea that each is trying to take advantage of the other. They must realize that confidence in each other is the key to cooperation, that mutual confidence will prove to be a great asset to each of them.

Far too many times in the past we have found city governments and the management of transit systems at each other's throats, each striving for that last ounce of blood, each realizing perhaps that there is a great middle ground upon which they could do the greatest good for the greatest number, but each holding out—idealistically perhaps—for its own point, forgetting that they are both servants of the people, and only by serving best the greatest number can they both prosper.

Cities and transit systems *can* work together with mutual confidence. And, again, I use St. Louis as an example.

The city of St. Louis is headed by the Honorable A. P. Kaufmann as Mayor. The regulatory body is the Board of Public Service and legislation is by the Board of Aldermen, the members of which are elected from all parts of the city. On planning, the city is ably assisted by the City Planning Commission, of which Harland Bartholomew plays a most important part.

The business district of St. Louis is on the banks of the Mississippi River. In fact, it's in a bend of the river. Our business district is highly concentrated and greatly congested.

Thus, to a large degree, geography compels the greater portion of our population to move practically to the eastern edge of St. Louis every morning. And this same crowd hurries westward each evening.

The end of the war presented a grave problem to St. Louis. The population of the city and adjacent suburbs, during war years, had increased by many thousands. The removal of restrictions on gasoline and tires added greatly to traffic congestion. When automobiles again are in full production, traffic will be even more congested.

City officials realized that something had to be done to remedy the traffic problem as soon as possible.

Transit company executives knew that the thicker the private automobiles packed the streets, the slower buses and street cars would move. Transit company officials also knew that, to hold their customers during the competitive period after the war, schedules not only must be as fast . . . but faster. Improved service must reduce traveling time if folks with a free choice were to continue as city transit customers.

Here was a tremendous problem, and one that must be acted upon quickly. The city and the various business groups knew, from the number of people carried into the downtown area each day, that provision for the proper routing of transit vehicles was most important. A free

flow of all vehicles must be maintained at all times to serve the area with employes and customers.

Substantial progress has been made in solving that problem. To my mind, confidence played a most important part in its solution. The city had confidence in the transit company. The transit company had confidence in all phases of the city government—executive, regulatory and legislative—and the City Plan Commission. Business groups had confidence in both the city and the transit company, knowing well that each would not hold out for any pet theory or pet ideal but that all would work together best to serve the greatest number.

The war has been over eight short months; short in the *tempo* of this fast-moving postwar period.

Here are the results of the solving of the problem, with each group having confidence in the other.

Express buses were inaugurated, with an adjusted fare schedule. These express buses save up to 34 minutes a day for customers. This was approved by the Board of Public Service.

The Board of Public Service authorized the substitution of buses for street cars on eight lines, with the consolidation of some of the lines at the time of substitution with greatly improved service and travel time saving through reroutings in the downtown area.

Complete downtown rerouting was worked out through complete cooperation with the city, the City Plan Commission, the transit company and the downtown merchants and business groups. Even though some lost a little and some gained a little, the ultimate result was the greatest good for the greatest number. There are no hard feelings on the part of any group.

The Board of Public Service of the city immediately granted the permits to the transit company for the rerouting.

The Board of Aldermen promptly passed the necessary ordinances calling for the elimination of parking on certain streets in the downtown area, and the converting of certain east and west streets into one-way thoroughfares.

The transit company changed both street car and bus routes in a manner that would relieve traffic congestion and thereby greatly shorten the travel time for its customers in the downtown area, which in turn makes its service more attractive and enables it to hold in the postwar era a larger percentage of its war-acquired customers.

By authority of the Board of Public Service the transit company started a downtown 5-cent loop bus service to operate north and south and east and west. These buses serve the parking areas on all sides of the business area. They operate on a 5-minute schedule. Should anyone desire to drive his automobile and park it in any of the parking areas adjacent to the congested area, he can ride the buses into and through the business district for a nickel.

Through the cooperation of the National Park Service, the city has obtained the use of a large riverfront section which is being temporarily converted to a public parking area. This parking area is served by loop buses. The east and west loop bus route also will be convenient to Union Station, which is used by all railroads serving St. Louis.

On these loop lines transfers are not given or accepted, nor are the regular weekly system passes accepted.

We still believe, of course, that city transit lines offer the surest, safest and most economical way to travel to the downtown area.

But, for those who do drive, even only now and then, the loop service makes it possible for the motorist to avoid heavy traffic in the business district. And his use of loop buses also reduces the amount of traffic in the congested area.

STATEMENT NUMBER THREE:

A city transit system must have a profitable operation in order to render the type of metropolitan service which is necessary to the growth of any progressive American city.

If you know of a city where the transit system is losing money, or operating near the line of red ink, you probably have observed that service suffers there. No transit system, whether privately or publicly owned, can render efficient service while operating expenses are more than income.

In St. Louis, where we have been making money, a major portion of our revenue has gone to improve service. In fact, we have invested future as well as past revenue. As a result, Greater St. Louisans will have 524 new buses and 100 new streamlined street cars added to the fine equipment already at their service. We have invested approximately nine million dollars in new equipment.

The transit industry is a volume business. During the war periods when the passenger volume was high, profits were good. Operating costs also moved upward. In the prewar period, for example, new 40-passenger buses cost $10,000 apiece. Today, the price tag is approximately $14,500. New street cars cost $17,000. Today, try to buy one for less than $22,000. Those are St. Louis figures, but I'm sure they are representative.

In the prewar period it cost for wages of operators alone, 96 cents per hour for every hour a transit vehicle was on the street. Today our cost is $1.32, an increase of 37.5 percent.

Our fare is still the same. Despite this we have prospered, due solely to the large volume of passengers we have handled. Where will we stand if that volume goes down any appreciable amount?

To render fast and efficient service, to provide extension of lines, which are in constant demand, a transit company must continue to buy new and modern equipment in large quantities. To do this it must operate at a profit.

As stated above, our operators' wages alone have increased 37.5 percent. Our total wage bill represents 47.5 percent of our operating expenses. In addition to this, all our other expenses have increased proportionately.

I am in favor of the lowest possible fare that will return a reasonable profit.

Should our volume decrease to any extent—and it is almost universally acknowledged that it will—we are faced with several choices:

First, a reduction in taxes, which would in effect be a subsidy to the transit company by the city. This, even though practiced by some municipal systems, is hardly practical. Cities, too, are faced with constantly increased costs of operation and a reduction in transit taxes would of necessity have to be passed on to other corporations and to individuals.

Second, a fare adjustment upward. This is always unpopular, but necessary if your transit system is to maintain a profitable operation. And remember, to render a good service to the people it must be profitable. Whenever an increase in transit fares is proposed there is always the suggestion of municipal ownership. Let's analyze it briefly.

In the calendar year 1945 the St. Louis Public Service paid to the city of St. Louis approximately one and one half million dollars in taxes.

In New York the municipal operation will fall short 47 million dollars of making expenses and it is estimated that the deficit will reach an all-time high of more than 54 million dollars during the next budget year. Mr. Charles P. Gross, Chairman of the Board of Transportation for the City of New York, pointed out recently that even a 100 percent increase in the fare would not cover the costs of subway expansion but would only help the city to rehabilitate the present lines and pay increased wages.

In a recent edition of *Passenger Transport*, the official publication of the American Transit Association, I quote the following with reference to Cleveland, a municipal operation.

> As a result of the decision last week by Impartial Umpire David Ralph Heitz, a wage increase of 13½ cents per hour was awarded to all operating and miscellaneous employes of Cleveland Transit System . . . the increase will cost the system $1,825,000. CTS General Manager Walter J. McCarter pointed out that the 1946 budget provided for a loss of $364,000 for the year—even without the wage increase.

The City of Detroit, a municipal operation, has recently increased its street car fare 66⅔ percent, and with this it is stated there will in all probability be no return to the city.

San Francisco, a municipal operation, has recently asked for an increase in fare from 7 to 10 cents, with three tokens for a quarter, or 8⅓ cents each.

Perhaps a fare increase is inevitable.

Third, there is one possibility of eliminating the necessity of either decreased taxes or increased fares. That possibility is the maintaining of a high volume of passengers on transit lines.

You will recall that I stated the transit industry is a volume business. Furthermore, it was stated that approximately 61 percent of the entire population is dependent on the transit system sometime in the 24-hour period.

That brings me to STATEMENT NUMBER FOUR:

In your planning of arterial traffic ways, express ways, or whatever you desire to call them, and in all other city planning, maximum consideration must be given to the movement of mass transportation vehicles.

I think it possible that in the past, perhaps too much consideration has been given in the urban areas to the movement of private vehicles, which statistics show to be a minority group, in so far as the number of people moved is concerned.

Mass transportation vehicles serve the greatest number and our democracy was built on the theory of the greatest good for the greatest number.

If you gentlemen, through your city planning, can expedite the movement of transit vehicles so as to speed up the service, thereby reducing travel time for customers—the majority of our population—we can make our service so attractive that I believe we can retain a large percentage of our present volume, thereby maintaining our profit position and eliminating the necessity of either a reduction in city taxes or an increased fare.

And now, let me briefly review the statements I have made.

A good mass transportation system is the life blood of any city. An efficient transit system is one of the city's greatest assets.

Cities and transit companies have many mutual problems that can be solved only through complete cooperation.

A city transit system must have a profitable operation in order to render the type of metropolitan service which is necessary to the growth of any progressive American city.

In your planning of arterial ways, express ways, or whatever you desire to call them, and in all other city planning, maximum consideration must be given to the movement of mass transportation vehicles.

Transit in City Planning

GUY C. HECKER, Executive Manager American Transit Association, New York, N. Y.

TODAY we have annoying shortages of many things we formerly could purchase at will—houses, household furnishings, clothing and numerous other necessities; but there is one thing of which we have a growing abundance—traffic congestion.

Despite vast expenditures for street widening, new thoroughfares and traffic control measures, traffic congestion continues to slow down the circulatory systems of our cities, with resulting costly delays in the movement of people and goods. The fact is that the remedies thus far applied have not solved the problem of adapting to an automotive age the street systems designed in a horse and buggy era.

At the same time there has been a definite and substantial shift of population away from the older, central districts of our cities to the suburban areas. The effects of these shifts are three-fold.

First, property values in business districts, the high tax-base areas, are steadily declining. Second, is the constant growth of blighted areas adjacent to business sections. Third, is the steady increase in the cost of extending to suburban areas necessary public services, such as water, sewerage, streets, lighting, and police and fire protection.

This decentralization is viewed with alarm by experts in the field of city planning. Harland Bartholomew, City Planning Engineer of St. Louis, recently posed the problem in this way: "Will decentralization continue at an accelerated pace until the population has been spread so thin that no one can pay the bill?"

Both traffic congestion and decentralization apparently are closely related to local transportation. The dominating factor in their simultaneous growth during the past quarter of a century undoubtedly has been the automotive vehicle, which made suburban areas more readily accessible but at the same time built up an unprecedented and totally unforeseen burden of traffic upon our inadequate street systems.

Well, what are we going to do about it? Certainly no one in his right mind thinks that people could be persuaded to give up their automobiles. As a matter of fact, all of us confidently expect more and eventually cheaper automobiles in the future. Nor does it appear that it will be practicable to place upon the use of automobiles any acceptable restrictions that will afford a satisfactory measure of relief from traffic congestion. The problem, in the final analysis, is primarily an economic one.

Walter H. Blucher, Executive Director, American Society of Planning Officials, at a recent meeting in Boston said,

> The private automobile has become a sacred cow in America—an untouchable. I am convinced that we are going to get into a very considerable amount of trouble if we continue with that attitude.

Mr. Blucher then pointed out that through many of the things done in our cities we are encouraging people to use private automobiles when they ought to use some other form of locomotion. In concluding his remarks, he made this significant statement:

> I think it is very important, unless we are going to bankrupt our cities by trying to provide facilities which we cannot provide for every individual, that we begin to think in terms of locomotion by our feet, and second by moving people with the second best method of transportation, which is mass transportation.

I believe that each method of transportation has its own place in our economy. Everyone will agree that any person who can afford an automobile should have one. It has a definite place in our scheme of life, for recreation, for intercity driving or driving between points which are not accessible or convenient to other methods of transportation, and for many short, quick trips. The automobile definitely has its place, but I believe you will agree that its place is not on the downtown city streets, where the personal convenience of a very small minority of our citizens constricts the flow of the great mass of people who must obtain maximum usage from all too inadequate existing thoroughfares.

Today, most experts in the field of city planning agree that transportation must be considered as an integral part of any master plan for a city, and that in making maximum use of public transportation facilities lies the only economically feasible method of solving the hopeless traffic tangle. It is to that phase of the problem of city planning that I wish to direct my remarks.

Why have city planners come so generally to accept the foregoing views? Most important, undoubtedly, is the fact that public transportation vehicles are the most efficient users of street space. The average number of passengers per automobile, based on counts in many cities, is 1.7. The average automobile is approximately 16 feet long. Thus the lineal street space per lane occupied by a passenger in an automobile is a little less than ten feet. A motor bus, seating 40 persons, is approximately 35 feet long. Based on a *seated load only*, the lineal street space per lane occupied by a passenger in such a bus is about nine-tenths of one foot.

So a 40-passenger bus is ten times as efficient in the use of street space as the average automobile. During rush hours, when traffic congestion is at its peak and transit vehicles of necessity carry standing passengers, their efficiency is correspondingly greater.

It also has been found that a single lane on an express highway can move about 1,500 automobiles per hour. At the rate of 1.7 passengers per automobile, the capacity of a lane of highway in terms of persons transported is roughly 2,600 persons per hour. A surface transit vehicle can carry from 9,000 to 12,000 persons per hour per lane, depending upon its size, and on rapid transit systems, where trains are operated on private rights-of-way, up to 40,000 passengers per hour per lane can be carried.

So it is evident that, in searching for an economically sound solution of our traffic congestion problem, there are great possibilities in making more and better use of public transportation.

Rapid transit, in the generally accepted sense of the expression, has meant elevated railway or subways with high-speed train operation. The cost of such facilities, however, is so high that up to the present time the only American cities that have them are New York, Chicago, Philadelphia and Boston. Consideration has been given to the construction of subways in other large cities, both in the United States and Canada, to ease traffic congestion, primarily in the business sections of the city. Such rapid transit facilities are at present being seriously considered in both Toronto and Montreal, Canada.

There are, however, other ways of providing forms of public transportation service, approaching in speed that of the subway and the elevated railway, which are less expensive and better adapted to all but the very largest cities. The simplest of these, of course, is an express service along existing surface transit routes, paralleling local service.

There are a number of larger cities in which such services are now being provided, with substantial time savings to passengers traveling to and from their homes and places of business. The express vehicles are operated with local stops at the outer end of a route, for taking on and discharging passengers. Then, from a designated point on a route these vehicles run express to and from the downtown business section of the city, where passengers are discharged.

Outbound, the operation works in reverse. The express vehicles pick up passengers in the business area—then run express to the end of the express zone. From that point to the end of the route the express vehicles operate as locals. Within the express zone, local service is provided by separate vehicles with transfer privileges to and from the outer zone.

The possibilities of another form of rapid transit service now are attracting widespread interest among planners, highway engineers and traffic engineers. As you know, the Federal government has appropriated large sums of money, to be matched by state and local funds, for an extensive three-year highway building program. Substantial sums have been definitely allocated to the construction of freeways within cities. In a number of cities where plans for such freeways are now being made, careful consideration is being given to the inclusion of facilities for public transportation. The cost of providing such facilities represents but a small fraction of the cost of the freeways themselves. If the facilities are properly planned, public transportation operations will in no way interfere with the operation of private automobiles.

If no provision is made for public transportation on these freeways, there is no doubt that the communities will find it necessary in downtown areas to provide, at great expense, additional off-street parking facilities.

But where can such parking space be found in the downtown areas of the cities of today? Each working person requires approximately 150 square feet of working space, and each automobile about 250 square feet for parking. With an average of 1.7 persons per car, it will be seen that it requires approximately the same space for parking of our cars that it does for us to work in. To provide this space not only would be prohibitive in cost, but would be an uneconomical use of land in our already overbuilt downtown business sections. On the other hand, the transit vehicle requires no parking space. Unless our new expressways are to defeat the purpose for which they were designed—to speed the flow of traffic—facilities for transit operation should be incorporated into them.

The operation of such rapid transit is very simple. Transit vehicles in the outlying sections of the city can operate on the surface as they now do and then, at designated points, enter the expressway and continue downtown at high speed, stopping only at relatively few points to take on and discharge passengers.

Appropriate, inexpensive stations can be incorporated in the freeway structure to facilitate transfer to and from important intersecting bus or street car lines. Also low-cost parking lots can be provided at the outer ends of such freeways, where passengers from suburban areas can park their automobiles and take the express transit lines downtown.

The fact is that public transportation has built up central business area values. Moreover, public transportation has been the dominant factor in preventing greater decentralization and, consequently, greater destruction of property values in the high tax-base areas. This has been known to city planners for many years, but it seems that downtown property owners have been slow to realize it.

For example, downtown merchants long protested bans on curb parking in these areas, until recent studies disclosed that only three or four percent of the shoppers were curb parkers. Such a study, conducted by Robert A. Mitchell, Traffic Engineer of the City of Philadelphia, recently convinced downtown businessmen of that city that they should support a number of measures proposed for speeding up traffic in the business area of Philadelphia, including the abolition of parking on a number of downtown streets. The program was approved by the city authorities and put into effect at practically no cost, but with excellent results which benefited not only those coming to shop but also all those who work in the area.

There is a growing belief among those studying the traffic congestion problem, that parking lots on the fringes of the congested areas, combined with bus operations adequately serving the downtown business areas, would greatly aid in decreasing downtown traffic congestion.

Experiments in Cleveland, Ohio, with such a system have proven very satisfactory, and plans are under consideration for acquiring additional

parking lots on the fringes of the downtown business district further to alleviate traffic congestion. A somewhat similar plan has been in satisfactory operation in the business district of Atlanta, Georgia, for a number of years, and has helped decrease downtown traffic congestion. Other cities are known to be considering the establishment of fringe area parking lots and special downtown bus service as a part of their over-all plans to speed up all traffic.

Existing thoroughfares connecting places of residence, recreation, commerce and industry constitute a network which, if modernized, would provide greater traffic capacity, higher speed and added safety. We must not get the idea that expressways, when and if built, will carry more than a small fraction of the total traffic in any city. Therefore, we need to utilize the existing street system to its maximum efficiency if we are to meet the future needs of our cities at a cost that will not be prohibitive. Keeping in mind the relative efficiency of the use of street space by the automobile and the transit vehicle, we are inescapably led to the conclusion that there is a tremendous public stake in bringing the use of public transit into proper balance with other users of our streets and freeways.

In conclusion, let me quote the words of Russell H. Riley of Harland Bartholomew and Associates:

> Ever since the advent of the automobile, the larger American cities have struggled continuously with the problem of vehicular movement and parking, yet experience indicates that it would be impossible, both physically and financially, to widen enough streets to accommodate the normal daily movement of all persons if they traveled only by private autos.
>
> The answer manifestly is better mass transportation facilities. Transit vehicles require a much smaller amount of street space per person, and require practically no parking space. The increased use of these facilities is probably the greatest single factor in reducing congestion and in preventing the need of large public expenditures for street improvements.

Rail Entrances and Terminals

W. G. VOLLMER, President, The Texas & Pacific Railway Company, Dallas, Texas

RAIL Entrances and Terminals. Back in August, 1873, the Texas and Pacific Railway operated its first train into Dallas, at that time a hustling little frontier town of some 4,000 people. This first train came into Dallas on a track that extended along what is now Pacific Avenue. As the young town grew, business houses and industrial plants built up along the Pacific Avenue tracks, and the services flowing from the use of these tracks became an important part of the economic life of the city. Like nearly every city in the Nation, Dallas grew up around its railroads. As it evolved from a frontier town to a big, busy city, with business houses spreading out and around these Pacific Avenue tracks, with streets cutting across them, traffic problems began to appear. All of the through freight and passenger trains of the Texas and Pacific Railway passed along these Pacific Avenue tracks, interrupting the movement of vehicular traffic, and presenting an element of danger to life and property. These traffic problems became increasingly serious as the years passed and the city grew larger. Finally the railroad became a victim of the growth and development it had made possible—it was squeezed off Pacific Avenue, except for a few blocks on the west end of the street. What happened in Dallas to the Texas and Pacific has doubtless occurred to other railroads in other cities, and it is quite possible that situations of like nature will continue to develop as the populations of cities grow.

Thus, rail entrances into large urban centers are a problem with which planning groups and commissions must cope. It is, of course, much easier to pose a problem than it is to offer a solution. I shall outline briefly one solution and touch on its advantages and disadvantages.

Joint Trackage. Let us assume, for illustrative purposes, that a city is served by twelve railroads and each of the railroads has a right-of-way into the city. The number of entrances might be reduced to four by several railroads joining together in using the tracks of a single railroad. From the point of view of planning commissions such arrangements offer many advantages. The number of grade crossings could be reduced as much as 75 percent. The cost of grade separations would be reduced by almost the same percentage. By elimination of many grade crossings, the possibilities of crossing accidents would be materially decreased. And, most important of all, the flow of motor traffic would be considerably improved.

But from the railroads' point of view, especially the railroads called upon to relinquish their valuable rights-of-way to use the tracks of another, such an arrangement would result in long-range financial sacrifices, for it would mean the loss of team and industrial tracks from which thousands of dollars are derived annually by virtue of the traffic

such tracks control. It is a situation that cannot be treated lightly for it is extremely difficult to determine accurately the aggregate financial loss when important team and industrial trackage is relinquished. There also arises for consideration the question of equitable trackage arrangements—arrangements that would be fair as to cost and equitable as to train operations.

To a very great extent the question resolves itself into one of determining (1) whether the physical properties of several railroads are so situated that they can economically change over to the use of a given road, (2) what is just compensation for the railroads relinquishing their trackage into the city, and (3) what sort of satisfactory operating arrangements can be effected with the railroad whose tracks are to be jointly used. As I see it, there can be no set formula, for in each case there will be many complex problems that will require individual consideration and individual solution.

Working Together. The railroads generally recognize and appreciate the problems that exist. I would say that they should be just as anxious as the cities to speed up the movement of trains into and out of the terminals, to reduce grade crossings, and to eliminate traffic hazards and accidents. I would like to feel that I could speak for all the railroads when I say that we are willing and anxious to work with city planning boards in seeking a solution to these vexing problems. For I know that by working together in a sympathetic and understanding manner the railroads and the cities can find a workable solution when the question of rail entrances arises.

Railroad Terminal Facilities. During the past several months there has been considerable public discussion and much newspaper space devoted to the question of terminal facilities. It has always been my belief that the railroads should provide their own rail terminals at their own cost and that these terminals should be in keeping with the needs of the community. On the other hand, I am opposed to the proposition sometimes advanced that the railroads should be required to provide terminal structures that transcend the normal needs of the city. Changes in and modernization of terminal facilities that are in keeping with the development of a community are to be expected and I believe should be effected, but since such improvements are paid for, and rightly so, by the railroads out of earnings, or through capital borrowing, and not paid for by taxpayers, these facilities should be in keeping with both the needs of the community and the potential returns upon the investment. This is essential if the railroads are to remain on a self-sustaining basis, contributing to the upbuilding of the community not only by the many services they render but also by the taxes they pay into local, state and Federal governments for the cost of conducting government, maintenance of schools, etc. But the railroads cannot provide their own fixed plants and terminal facilities and then compete on an equal basis with other com-

mercial transportation agencies that are furnished these kinds of facilities at the expense of the taxpayers. Spared the necessity of taking these important factors into account, other commercial transportation agencies can establish rates and fares with which the railroads cannot compete. The railroads, through heavy taxation, contribute to the building and maintenance of the facilities the commercial airlines, trucks and buses, and inland water carriers use and which are built, operated and maintained largely at the expense of the taxpayers.

It is somewhat surprising to see cities enthusiastically voting bonds and spending taxpayers' money by the millions for air terminals, while at the same time they are demanding that the railroads spend huge sums of their own hard-earned funds for new rail terminals.

Tax-Provided Facilities. I appreciate the fact that there are certain functions which must be performed by government for the general good of all the people, but, in my opinion, the supplying of fixed plants for commercial airlines, trucks and buses, and inland water carriers does not come within that category. If the Federal, state and municipal governments are determined to provide these facilities for other commercial transportation agencies, and it appears they are, then I feel that the railroads are within their rights in insisting that the commercial users of these tax-provided facilities pay a just and equitable user charge, and in arriving at that charge the every-day principles of business should govern—such principles as the assessment of a fair rate of interest upon the taxpayers' investment, provision for amortization of said investment and the payment of an equitable proportion of the maintenance and operating cost of the use of the facilities. These are the principles that apply to business in general, and I can see no good or sound reason why they should not apply to all forms of business, including the commercial airlines, trucks and buses, and inland water carriers.

Dallas Master Plan. Dallas has a Master Plan. I think it is important for a city to plan constructively for the future. Dallas is doing that, and I heartily support this orderly plan of action—with perhaps one reservation. That reservation concerns that portion of the Master Plan which contemplates that the City will build a helicopter airstrip and a union bus terminal just west of the railroad union station. Now, if the City proposes to use the accepted business principles which I have suggested, for assessing an adequate user charge for the facilities, then I am inclined to go along with this portion of the Plan. But unless this is done, I would not be fair to the railroad I represent if I did not vigorously oppose it. Competition of the commercial transportation agencies using these city-provided facilities would probably result in the loss of considerable revenue to my railroad and to the other railroads serving Dallas. And in the long run I am convinced that the City itself would suffer by weakening the ability of its railroads to provide adequate and satisfactory service.

Government Aid. To illustrate the extent of governmental financial aid to the various forms of commercial transportation, other than railroads, I call attention to the fact that President Truman in his recent budget message outlined Federal capital outlays for other transportation facilities of nearly one billion dollars for the fiscal year of 1947. During the same period the railroads will, in all probability, spend out of their own pockets over one-half billion dollars.

If the Federal, state and municipal governments persist in subsidizing other forms of commercial transport, it is conceivable that the railroads may be forced to ask for tax relief partially to off-set the financial aid given their competitors in the form of fixed plants. By fixed plants I mean the highways, air terminals, meteorological services and inland waterways. Not only are the commercial users thereof relieved of the cost of capital investment necessary to build these facilities, but they are spared the expense incumbent upon all ordinary business firms of adequately maintaining and paying taxes on these properties.

A sound, solvent and efficient national railway system is essential to continued social and economic progress. The railroads are the steel cross-beams upon which our whole economy rests. The progress of America can be measured in the terms of transportation—railroad transportation. I make this statement not with the thought of depreciating the value and importance of other forms of commercial transportation, for each has a place in our economy, but rather on the basis of the record as it stands today. The railroads must continue to operate, whether under private enterprise and initiative or under that of government. And I would like to believe that I express the thought of all of you when I say "No one wants the latter to happen."

Equal Opportunity. In conclusion, I should like to reaffirm my statement that I believe the railroads are willing and anxious to cooperate with cities in working out a solution to the railroad entrance and terminal problem. All the railroads ask is that all forms of commercial transportation be treated alike. If the railroads are given equal treatment and equal opportunity in competition for the nation's freight and passenger traffic, they are confident they will be better able to solve these problems, and also to render better service to the cities of the Nation.

Air Facilities of the Future

S. E. TRAVIS, JR., Superintendent of Airports, Region IV,
Civil Aeronautics Administration, Department of Commerce, Fort Worth, Texas

IN JANUARY of this year, Mr. William A. M. Burden, Assistant Secretary of Commerce, told the American Road Builders' Association at their annual convention in Chicago:

> There is a wide and growing public interest in aviation which, *if given the opportunity*, can be translated into the purchase of aircraft until 400,000 planes are in use by 1955. When I say "if given the opportunity," I mean, if these potential buyers are offered a product with real utility.
>
> Greater utility for the airplane will come from two sources. One is the aircraft industry, which has the important task of building safer, easier-to-operate planes. The other source is made up of all the private and public interests concerned with building airports. . . .
>
> No matter how fine a plane the aircraft industry builds, it will be of little value unless our present airport system is improved drastically. Indeed, it is hardly accurate to use the word *system* in talking about our present haphazard scattering of landing areas.

I think you will agree that we have to do some planning now. A great deal of confusion is caused by the tendency to think in terms of one airport, or of an airport that is designed primarily for one type of flying. On one hand there are the advocates of nothing less than a $100,000,000, seven-star-super-duper airport, who point out that, after all, their town is the center of the world air map! Of course your town is, too. And so is mine. At the other extreme are the advocates of a single strip, a couple of hundred feet wide and a few blocks long, at the intersection of Main Street and Broadway.

To a certain extent, both are right; but I hardly need to point out to *you* that neither one is the true solution of the airport problem. I should have no trouble in convincing you, of all people, that what we need is not so much the solution of specific, local problems, but a coordinated, correlated system of *complete set of solutions.*

We will need large, elaborate airports for air transport aircraft. We will need small, attractive, and relatively inexpensive airports for small airplanes. And we will need medium size airports for *mixed* operations—where scheduled traffic on so-called feeder lines can be combined with traffic of local operators and resident owners of personal aircraft.

I believe the problem is most acute in our metropolitan areas. There are about 150 such metropolitan areas throughout this country. In nearly every one of them there will be a need for *an airport system;* not one airport, but several—and probably several different kinds. But as you know only too well, land in most metropolitan areas is scarce, expensive, and usually in demand for a multitude of conflicting uses. We believe, and hope we can convince you, that planning now for enough landing facilities—of the right kind and in the right places—is the most impor-

tant city and regional planning job facing us today. It is the only one I know of that offers a chance of finding a *complete* solution—perhaps even the *right* solution—at the outset.

Back around 1910, some experts were convinced that the automobile market was saturated. Handling potential traffic, they thought, was dependent upon paving (and occasionally widening) our city streets. It took a quarter of a century for us to find out that the only way to move traffic efficiently is with uninterrupted flow; and the way to get that is to provide a system of limited access highways—freeways, express highways, parkways—call them what you will. Perhaps, if we hadn't muffed that one so badly our cities might have been better suited to the automobile age.

Many other aspects of city planning are concerned with revision or rehabilitation in some form—correcting mistakes that have been built with durable materials. We have a chance now to foresee, and make adequate provision for, our airport needs. Don't let us miss it.

The general characteristics of each airport are determined by two things: by the kind of airplanes that will use the landing area; and by the volume of traffic (especially during peak hours).

Transport planes require long runways and substantial pavement for their landings and take-offs. Scheduled operations—multi-engined aircraft, flying in daylight and in darkness, in good weather and bad—require reliable lighting equipment, complex communication and navigation facilities, and precise traffic control procedures. The characteristics of airline aircraft, and the nature of their operations, require a big, elaborate, (and frequently an expensive) landing area. Their clientele, and the business that they generate, determines the sort of *building facilities* that will be required. These, too, are elaborate and expensive.

Similarly, at the other end of the scale, the performance characteristics of personal aircraft will determine the size and shape of the landing area *they* require; and the needs and preferences of airplane-owners will determine the sort of buildings required on a *small* airport.

So much for *the kinds of airplanes* you will have to consider. Now for the volume of traffic you will have to provide for.

First, let us examine the transport part of the problem; the part that needs—and will use—the big, elaborate, *major* airports. During the war there were fewer than three hundred and fifty DC-3's in use by all the domestic airlines combined! At several major airports during peak hours, so many of these airplanes were scheduled to land or take off that traffic capacity of the airport was saturated. Within five years there will be at least 1,000 airplanes in use by our domestic airlines, most of them capable of carrying more than twice as many passengers as the DC-3. Fortunately, we have the makings of a pretty good system of *major* airports on which to accommodate this airline traffic. There is going to be a lot of flying in airline planes. Besides being fast, it is a comfortable

way to travel. There is little doubt that in a few years we shall have from five to ten times as much flying of that sort as we have today.

But that is only one kind of flying.

Before the war there were about 25,000 small airplanes throughout the country. *Within ten years we are quite likely to have 400,000.* Right now there are 35,000—and the aircraft factories are going full speed on orders for 40,000 more! Our system of *major* airports will have to take care of two or three thousand transport planes. Our system of *small* airports will have to accommodate 400,000!

For these smaller, lower powered airplanes, most cities will need—in addition to the major airport—*several* small airports or "airparks," as they are commonly called. Compared with the major airport, each of these will be small—probably less than one-fourth the area of the large field—and they will not be expensive. A Class V airport for transport operations frequently is a five million dollar proposition. For half that amount you can provide ten small Class I or Class II airports (at $250,000 apiece)! Finding—and holding—a sufficient number of suitable sites is the immediate problem. Now is the time for Planning Commissions to determine—how many? how big? where?

With a clear understanding of just what constitutes a suitable site (and a whole lot of ingenuity) you may find enough still available. But that is only because subdivision and building have both slowed down during the war. There is little likelihood that they will still be available a few years from now.

Preparation, right now, of a Master Plan of Airports—an over-all pattern of all types of airports likely ultimately to be needed—will pay dividends in orderly development, convenience, and cash. Such a Master Plan should, of course, be correlated with all the other elements of a community plan. There is, in fact, a growing awareness that airports themselves constitute an element in the community plan—a relatively new, but exceedingly important, element. That they can be fitted into the expected pattern of physical development, and into the social and economic life of a community, is becoming more and more evident.

Take, for example, the *small* airport. Most of our cities, even our suburbs, suffer from lack of sufficient open space. There is no reason I know of why a small airport on a well-chosen site, skilfully planned, carefully developed, and well maintained, cannot be as great an asset as a golf course or a park in alleviating that condition. Nonsense, did you say? An airport is objectionable near a residential area? Most opinions expressed on that score cite one or both of these two arguments: objectionable noise, and damage from falling airplanes. Neither one is justified by the facts. Remember that we are talking now about a landing area for the exclusive use of small airplanes. Multi-engined transports and the exceedingly high-powered military planes so common nowadays *are* noisy. But the little fellows, even now, are not too bad.

One day last year some of us were in an office on one of the *small* airports near Houston. The venetian blinds were down. (We really do have plenty of sunshine in Texas.) Students were training on that field, using 65 h.p. Cubs. One after another they took off and passed directly over the office where we were talking. The noise that they made was really less noticeable than the street noises outside many a down-town office. Presently, I noticed the sound of another engine. It was so much louder than the rest, that I opened the blinds to see what sort of craft it was. It wasn't an airplane at all! It was a trailer gasoline truck on the highway—*and it was a good 200 yards away.*

So much for the *noise* of small planes. And the manufacturers haven't really tried to make them quiet. In the future they will.

Now for the danger from falling planes. The Safety Bureau of the Civil Aeronautics Board recently made a study of collisions of civilian aircraft with buildings. Their study covered the four years 1940 to 1943 inclusive. In the United States during those four years there were 17 collision accidents involving residential structures. In only eight of those was severe damage done to the buildings. In those four years *one occupant of such a building was injured.* The probability of an airplane striking your home is so absurdly small that it is difficult to express it mathematically. Does that surprise you? The pilot, you know, would much rather land on an airport than on your house. When we have enough landing areas in convenient locations, he will go to great pains to land on those and your house will probably be even more safe than today.

What will they look like, these small airports? Based upon the performance characteristics of the airplanes expected to use this kind of field, landing strips should be from 1,800 to 2,700 feet long (at sea level conditions). Except where frost or precipitation is great the landing strips will not have paved runways. They will be turf. Two such strips may be in the form of an "L". Where vacant land is scarce, "L", "X" and "T" shaped layouts are often suggested. When you can provide it, an all-way landing area is probably better.

Approach zones in line with the landing strips should be kept clear of obstructions that might project up into the flight path of an airplane gliding in to land, or one climbing out of a field. Satisfactory approach zone standards for a Class I airport are shown here. You have probably observed that when a plane takes off the pilot keeps going straight away in line with the runways until his plane has climbed to a height of 500 feet or more before turning out of the pattern; and that landing airplanes line up with the landing strip before gliding into the field. In either case they are flying over an approach zone.

Except for these approach zones which radiate out from the ends of the landing strips, the aeronautical activities at the airport will not restrict the use of land surrounding the field. On the contrary, each of the areas *between* the approach zones will lend itself to development as a

complete neighborhood with shopping center, certain community services and facilities, and surely some recreational facilities located near the airport boundary. Recreational facilities fit conveniently and quite appropriately into those parts of the airport not needed for aircraft.

The same principle applies to the only part of the approach zones in which use and height restrictions are really stringent—that is, right close to the ends of the landing strips. Community gardens might well be located there; perhaps even a football field—there will never be anything higher than the goal posts on it. Or, you may find the approach zone to be an appropriate route for an express highway or a parkway.

I have spoken of two types: the *major* airport, and a coordinated pattern of small airports. These together will form the bulk of your Master Plan of airports. In some of the larger metropolitan areas, however, other sorts may be needed. In addition to the major field, and the net-work of small ones, a separate facility for *miscellaneous commercial* activities may be required. Servicing and minor repairs will, of course, be provided for at each small field; but shops for major overhaul, airplanes sales, parts and accessories dealers, charter service operators, these and other related activities may tend to locate on a *miscellaneous commercial* airport. Not unlike *automobile row* or *the shopping district* down town. Roosevelt Field on Long Island came close to being that sort of facility in pre-war days. Many manufacturers were represented there, and dealers in parts and accessories. So, too, were the rent-a-plane people, charter service operators, aerial advertising companies, and flying schools.

Because that is where the problem is most acute, and because we look to you as planners to help solve it, I have stressed the metropolitan aspect of the problem. But it is axiomatic that every *new* airport increases the utility of every *existing* airport. Every town has a vital interest in the development of airports everywhere. If you were considering buying an airplane you would of course want to know what kind of base for operations there was in your community. But more than that, you would weigh the number of places to which you could fly your plane. You would ask yourself: Is there a landing field near Smithville, where my folks live? Will I be able to run up to Bear Lake on summer week-ends? Are there airports in most of the towns where I do business? If the answer to these questions is "No", you may drop the idea of buying a plane; and the airport in *your* community will lose a potential customer, simply because there are no airports in *other* towns.

If you buy a plane without considering these important questions, it is very likely that you will give it up in a year or two when you realize how little use you are getting out of it. That is what happened with more than 60 percent of the airplane purchasers in the years 1931 to 1939. That is why our *National Airport Plan*, which was submitted to the Congress in November, 1944, called for 2,900 of the proposed 3,050 new airports to be of a kind especially suitable for personal flying.

You don't know enough about airports to undertake this planning job? You can get the advice of men who do, for the asking. The Regional Office of the CAA nearest you will be glad to consult with you, assist in site selection, and advise you on airport design. The Office of Airports of CAA in Washington maintains an Airport Planning Service with a staff of consultants who will gladly do their best to get you started along the right lines.

Don't be misled into believing that the airport problem will solve itself. It won't. On the other hand, don't think of it as a staggering prospect. It isn't. This is one means of transportation that does not require miles of paved rights-of-way, expensive road-bed and tracks, or deepend channels over which to travel. It *does* require occasional tracts of land on which safe landings and take-offs may be made. *It needs those in convenient locations.*

Compared with most other municipal obligations, this one is relatively simple. There is no question about whether or not you can afford to tie up the necessary sites until they are needed. I believe *you can't afford not to.* Supposing the estimates are high, and you won't need them all? I can think of a dozen community uses for the land besides airport use. You can probably farm it in the meantime, and still get your money back if you decide you will never need it for an airport. *But you won't be able to do anything about it if you let the available, suitable, sites get away from you now.*

Report of Discussion

JOHN M. PICTON, City Planning Engineer, Kansas City, *Leader*

LESLIE WILLIAMS, City Planning Engineer, American Transit Company, New York, *Reporter*

ALL our speakers have agreed that all types of transportation are important. All should be fitted into a well coordinated plan properly balanced and adjusted for each different type of transportation.

Railroads: Mr. George Hutchinson of Chicago raised a question,

In the city of Chicago, the railroad lines have had pretty much their own way so that Chicago is literally crisscrossed by railroad lines. Are there any advantages to be gained by individual railroads in unified use of lines? Would it be to the advantage of a railroad to the extent that it would be willing to participate in the cost of combining lines with other roads to simplify the number of roads entering a city?

Mr. Vollmer replied,

I think that it would be advantageous to the railroads. Some of the principal railroads in Chicago are vitally interested in providing a union station that will take the place of probably four of the present stations, and that will involve the question of rail entrances. While I cannot speak for these railroads, I suspect that they will be interested in taking care of some of the costs that should really fall upon their shoulders. I would also suspect that they will look to the taxpayers of the City of Chicago to help them with the cost load.

Mr. Picton, discussion leader, drew out opinion that the population in Chicago and the transients who travel to and from and through the city are so large that, in his opinion, one universal railroad passenger station in Chicago would be a terrible thing for that community. He illustrated what he meant by that when he referred to the city of St. Louis. They have one union passenger station. In all the years that he had been acquainted with it, it has had wonderful advantages for travelers, who have been able to get off one train and onto another with the least amount of inconvenience. They have never had to travel across town. Connecting line trains have been willing to wait for the train that was late and the traveler was taken around the head block to his waiting train. If they had four or five stations, there would be many more connections missed by passengers in a hurry than have been missed in St. Louis.

But St. Louis is now confronted with a problem. Mr. Bob Young, the chairman of the board of directors of the Allegheny and also chairman of the board of directors of the Chesapeake & Ohio Railroad is an advocate of transcontinental sleeper operation from New York and Washington to Los Angeles and San Francisco and to the cities in the Pacific Northwest. The fact that Chicago has more than one depot enables railroads to move those transcontinental sleeping cars from station to station across the city. It is estimated they are able to do it in an hour and a half. The passenger is enabled to leave his baggage in the sleeping car. He can stay with the car and be transported by switch engine from one station to another through the railroad yards, or he can leave his sleeping car and go up town for an hour and a half's visit and return to the station from which his train leaves, and there he will find his sleeper.

But in St. Louis they have one station. They have a back-in station; all the trains pull ahead and back into the station from the east and from the west. The trains of today are generally long trains, anywhere from fourteen to nineteen and twenty cars, and, backing into the Union Station at St. Louis, the sleeping cars are right up against the head block, up at the front end of the station where the rotunda is and the station proper; all the mail and express cars are way out in the far end of the depot building; the locomotive is out there with its smoke.

If through sleepers from New York and Washington to the Pacific Coast have to be tranferred at St. Louis, in every one of the eastern trains which is pulled up and backed into the station, the sleepers are switched out, and then the train pulled back. Then the train that one is to leave on has got to be pulled out and those cars put back on again. It is said that it will take three or four hours to do that amount of switching. . . . That's what St. Louis is going to be up against with one depot. If they had more than one depot, this situation could be improved; they wouldn't have the problem of congestion.

Mr. T. B. Davis of Mississippi in putting his question, stated that he wanted to recognize fully the contribution the railroads have made to

this country. The railroads were here before automotive vehicles and the airplane and they moved people and goods. Mr. Vollmer directed with rather strong emphasis some remarks toward the matter of use tax for airports. Mr. Davis pointed out that in Mississippi something like thirty to forty percent of our lands were donated to the railroads. He asked Mr. Vollmer's explanation of that point.

Mr. Vollmer replied that there are today, and there were many years ago, approximately 230,000 miles of rail transportation in this country. When the United States government years ago in the pioneer days, granted lands to railroads so that they could be persuaded to go into the unknown wilderness and help develop the country, they granted these lands to 17,000 miles of railroad out of a 230,000 total. That left 213,000 miles of railroad which received no Federal land grant; and yet those 213,000 miles of railroad were compelled to sign agreements that they would give the Government the same consideration in the free haulage of government military materials and men that the 17,000 miles of railroad were compelled, at that time, to furnish free of all charges. In the later years the government changed the 100 percent free haulage to 50 percent. Since those pioneer days those 17,000 miles of railroads, which had received free land grants, and the other 213,000 miles of railroads have been paying for those lands through the charges for government freight, and government personnel, military and naval, at the rates which were authorized by the Government. During World War II, statistics show that the railroads were hauling, at the 50 percent rate, millions of tons of war material and millions of soldiers. In other words, on the 50 percent charge basis the railroad paid to the U. S. more than twenty million dollars a month. Statistics show that Class I railroads, in all those years, have paid Uncle Sam close to a billion dollars for those lands, which were worth fifty cents an acre at the time they were granted to the railroads. The railroad industry has repaid the Government many, many fold for those free lands, and before I sit down let me remind you that no other transportation agency has yet paid Uncle Sam a nickel for anything that Uncle Sam and the taxpayers have given them free.

Public Transit: Mr. Hare stated that one of the chief objections to mass transportation is the fact that during the peak hours considerable percentage of the people have to stand. Is it reasonably possible to look forward to transportation facilities that will provide seats during the peak hours to practically all the passengers? Mr. Wilson replied that using some figures from St. Louis, there are in service in the off-peak period in St. Louis approximately 250 buses and taking into consideration the street cars, the ratio is comparable. Those 250 buses were able to haul all the people they serve. During the peak hours, at the present time 827 buses are running. That means we have to have an investment in 650 vehicles that are used less than four hours a day. I think the citizens of our country demand good service, they demand fast transit

service, they demand vehicles that are mechanically correct, that are free from breakdowns and are clean. I would hate to say what the fare would have to be if we provided a seat for every transit customer during the peak hours. The transit industry, in its evening peak, which is the more acute of the two, has increased very materially since the war. During the war, staggered hours were universally used. Offices, department stores and factories spread their closing hours over sometimes an hour and a half and sometimes two hours, which enabled the transit vehicles to haul those people. Immediately after the war, they all desired to leave at the same time.

Mr. Hecker gave an explanation of the merits of trolley buses and street cars which is a problem that many cities are wrestling with today. He maintained that a transit system must be a profitable system if the best transportation is to be secured. In some instances, motor buses are the answer, if conditions warrant or justify motor buses. In still others, it is the trolley bus, and still others, the street car. We all know that where the traffic is sufficiently heavy, street cars appear to be more economical. In others, it is the trolley coach and sometimes it is the motor bus. It is purely an economical question and has to be decided in each instance on the facts surrounding each operation.

General Grant asked if the street car is going out because of the greater elasticity and other advantages of the bus?

Mr. Hecker replied that where the traffic justifies the rail line, then the street car will be operated; if it doesn't some other means will be used. That will have to be determined on the basis of the facts surrounding each situation. It is a fact that the number of street cars being operated has declined in the past 20 years, and it is fair to assume that it will decrease in the future. There will be some substitution. He does not think it is possible to give you any answer to that question that is specific enough to be satisfactory. All he can say is that the economical situation in each case will determine what the final answer is.

Mr. Wilson added that it costs today, not to build new, but to rebuild a double street-car track, approximately a hundred thousand dollars a mile; that doesn't include overhead. Going into the economics of it and again referring to St. Louis, we were faced with the problem of eight car lines that were operating on approximately eighty miles of single track. All that track was in bad condition. There were 155 street cars that needed replacing. To put that track in A-1 condition and, again forgetting the overhead, it would cost $4,000,000. To buy 150 street cars at $20,000 apiece would cost $3,000,000, or a total of $7,000,000. We are substituting that service with buses; we will replace the 155 street cars with 200 buses at a cost of $2,750,000. By the use of buses, with 200 of them instead of 155 street cars, we will materially lessen the cost, we will be able to give the passengers more frequent service, we will be able to give them faster service and we will be able, through the use of buses,

to put on an express service during the peak hours that will enable people from the outlying districts to shorten their travel time very materially to the downtown area. That is a specific example which I think holds pretty well throughout the United States. The street car is an excellent vehicle. We have a hundred of them on order in St. Louis. But I think the street-car track that will be built new will be very little.

Mr. Picton remarked that there are some cities that are getting to a point where they are going to eliminate street cars. In Kansas City, they wish to continue operation on five lines, but some of the other lines may change to trolley buses or motor buses, so it depends on the type of service that can be rendered and the size of the city and the metropolitan area and a good many other things.

Air Transportation: Mr. Worthman referred to the discussion of shuttle service between an airport and a central business district and asked for an expression of opinion on the possibility of shuttle service or some similar small airplane service to build up access to an outlying large airport. Would it be advisable to use the low land along the rivers for use of air strips and airports?

Mr. Travis replied that airports should be above high water. In some areas a pumping system would probably be necessary to keep the airports dry. Whether the cost of maintaining the levees and pumping systems would justify the facility is a question that would have to be determined locally. The question of air strips along highways has been brought up a number of times, and such a plan does have some advantages. The greatest disadvantage is that a man in an airplane is not forced to follow that highway. He usually flies the most direct route and too frequently that is not near a highway, and therefore, there is some question as to what utility the strips have if they are located by highways.

Mr. Cook, of Oklahoma City, remarked that since speed is one of the motivating factors for travel by air and so much of that speed is washed out through the fact that so many cities have their airports located thirty minutes from the downtown areas, and the tremendous costs involved in building the airports large enough to have 5,000-foot and 10,000-foot runways, he wondered if the aeronautical authorities have completely abandoned any idea of designing airports of the transport type so that planes can be landed at a steeper glide or steeper takeoff, making it possible to locate closer to the downtown area, therefore eliminating that loss of efficiency in a thirty minute trip to the airport.

Mr. Travis replied that there has been constant disagreement between some of the men in the Civil Aeronautics Administration and airplane manufacturers. He felt that the public investment in airports for large aircraft is rapidly reaching its top and that the aircraft manufacturers must of necessity begin to equip them with devices to permit them to get in and out of the areas that they have to operate from today so that the ports are as close to the business to be served as possible.

A Planning Pattern for Urban Redevelopment

MAJOR GENERAL U. S. GRANT, 3rd, Chairman National Capital Park and Planning Commission and 1st Vice-President, American Planning and Civic Association, Washington, D. C.

TO COMPLY with President Roosevelt's request for legislation which would establish urban redevelopment in the Nation's Capital, our Commission spent nearly a year in preparing the legislation, and has spent the greater part of another year in trying to secure its passage by Congress, adjusting the language to suit various points of view as far as practicable without conceding any principle that the Commission had adopted after full consideration of its importance. In drafting this legislation we had the advantage of Mr. Alfred Bettman's counsel, he being recognized as the outstanding legal authority on the subject, and it has been discussed at length, not only with our municipal authorities but also with representatives of all the various interests involved.

Our legislation, (contained in Senate Bill 1426), happened to come before Congress at a time when an organized drive was being made by the Home Builders Association to stop all public housing by the Government. The progress of our legislation has necessarily been very much impeded by the bitter feelings aroused in this contention, although one of the essential features of the bill was that it excluded any effort to settle the Federal policy as to public housing in the District of Columbia, and was intended to afford the greatest possible help to private enterprise to do the major part of the job under conditions sufficiently favorable to permit it to go into the field of low-cost housing to an extent it had never before been able to reach. Nevertheless, the Home Builders Association, with some backing from the National Association of Real Estate Boards, made an effort to so change the legislation as actually to do away with public housing or make it impossible for the Federal Public Housing Authority to build any more houses. On the other hand, various other interests wanted to open the door for public housing wider and wanted to insert in the legislation terminology which would impose on urban redevelopment various provisions they were interested in, such as special wage, special racial, and other requirements.

I will not attempt any description of the features of this argument, but feel it is pertinent to mention it so that you may be forewarned of the type of attack to which any urban redevelopment legislation you may contemplate will be exposed.

Probably the best thing for me to do is to outline each of the functions which it appears should be provided for in the urban redevelopment set-up, with a brief mention of the reasons for our adopting the particular solution contained in our bill. I think that it is no exaggeration to say that these general functions and the solutions adopted by our Commission are in general accord with the recommendations for legislation in the various States. Indeed, allowing for differences in local

conditions and in the political jurisdictions, it was rather surprising how much agreement there was throughout the country among those who had studied the problem. This was especially surprising in view of the fact that urban redevelopment is a new remedy for what is recognized as the most serious urban disease, namely, urban blight, and that any solution of the problem is necessarily pioneering in a new field.

FIRST of all, there must of course be a comprehensive, coordinated and consistent plan for the city's development, covering all elements of city planning. The preparation of such a plan should indicate in a general way the blighted areas, the reasons for their being blighted, and the general features of the means proposed to turn them into somewhat self-contained and well balanced, happy communities with all those amenities of life which Americans now look upon as one of their inalienable rights. Naturally, the preparation of such a plan is the function of the city planning agency, whatever it may be. If the city is surrounded by separate urban jurisdictions, it is necessary for this general plan to be coordinated with the plans for their development, especially as to thoroughfares and land use.

SECOND. It is necessary to select the blighted areas. Because of the financial import, and the possible effect on nearby neighborhoods, this is a most important function. It was our conclusion that the initial selection and outline of the blighted area should be assigned again to the planning commission, but that their judgment should be checked by the chief executives of the municipality,—the District Commissioners.

Having thus arrived at an agreement as to the location and extent of the blighted areas, the THIRD function will be replanning of the area so selected initially. This is again obviously a job for the planning agency. But again it is so important, it involves the property rights and the personal well being of numerous members of the community, and there will manifestly be several good solutions, the advantage of any one of which over the others will be so much a matter of judgment, that we felt the redevelopment plan proposed by the planning commission should be the subject of a public hearing and then, with such modifications as might seem advisable, would again be subject to the approval of the chief executive, in our case the District Commissioners.

It is pertinent to point out that the redevelopment plan should be in somewhat general terms, sufficiently in detail only to show how the purpose in mind can be attained, that the different income groups can be provided for, how the features necessary for a balanced community, such as schools, parks and recreation, shopping centers, and churches, may be included, and finally to permit an estimate of the financial return that may be anticipated. It should in no way be an exact design to govern the detailed layout of buildings and the exact location of utilities. These details are all matters which should be left to the developer to work out with the appropriate agency.

FOURTH. The redevelopment plan will be certified to the agency entrusted with the acquisition and disposal of the land. The duties to be performed by this agency are so important and the results of the redevelopment so dependent upon its good business judgment and efficient administration of its duties, that great care is evidently necessary not only in specifying the limitations of its authority and responsibilities, but also in the selection of the agency itself. It may be that in some communities the local housing authority or some other existing agency can assume these duties; but, because of special local conditions, we felt that in Washington a new agency should be established for the purpose.

The experience of our Commission indicated that this agency should be in the nature of a board of directors, that no single administrative officer should be burdened with adjustment of the conflicting interests that would inevitably demand consideration, and that to be effective the agency should consist of not less in number than the Graces and not more than The Muses; in other words, it should be a number between three and nine. We finally decided upon a board of five members, two appointed by the President, of whom one might be a Federal official, and three appointed by the District Commissioners, of whom one might be a local municipal official. As the duties of the board would be to settle matters of general policy and problems that proved especially contentious, and as it seemed important to have on the board leading citizens in whose judgment and discretion everyone would have confidence, they are not to receive any salary but will be allowed a per diem when actually engaged on the business of the land agency. This was because it was thought that the high type of citizen we wanted on the board would not be willing to close out his own personal business for any salary the city could afford to pay. Continuous administration of the board's work and the labor of preparing questions for its decision is to be provided for by the employment of a single high grade, all-time executive with such a staff as experience shows he will need.

The land agency having received the redevelopment plan, it will proceed to acquire the land within the designated blighted area by purchase, gift, or condemnation. Experience has shown that such areas of land can not be assembled without exercise of the right of eminent domain because there are always some land owners unwilling to part with their holdings at a reasonable price, and in such cases, the just compensation is manifestly something which the Courts must decide.

The land agency will then dispose of such parts of the land so acquired to such appropriate governmental agencies as are needed for the public uses contemplated by the redevelopment plan, such as streets, schools, playgrounds, police stations, and fire stations. The property so transferred will be paid for by the governmental agency out of its appropriations for the purpose for which it is to be used.

The remainder of the redevelopment area will then be sold or leased

to private enterprise for development in accordance with the redevelopment plan as far as private enterprise is prepared to bid for it a price acceptable and thought reasonable by the land agency for the new use proposed. It is recognized that the new use value placed on the land by the land agency may be less than the cost at which the land was acquired.

It is anticipated, however, that for housing, the sale price or rental of which is limited so as to meet the needs of really low income families, private enterprise may not be prepared to pay a reasonable price. Where this is the case, the land may be leased or sold to the Public Housing Authority for development with public housing.

In order to insure that the character of the development shall comply with that contemplated in the redevelopment plan, and that the rents or sales prices shall not exceed the limits of the incomes of the persons to be housed therein, the land agency is required to include in its sales contract or lease such terms as may be necessary to control the type, number, character, and prices at which the units may be sold or leased, and may specify the standards of construction and maintenance.

While it is recognized that the return on sales or leases, based on the new use value established by the land agency, may not fully compensate the city for the cost of the land, the increased values due to the redevelopment are expected to reimburse the city for those lands in a reasonable period of years by the increased taxation that the improvements will justify.

It is evident that the developers, whether private builders or the Public Housing Authority, may find that the layout proposed in the redevelopment plan can be improved upon in certain instances.

As a FIFTH essential element in the process, it is therefore, further provided that desirable changes in the redevelopment plan can be obtained by the land agency if jointly approved by the Planning Commission and the District Commissioners.

SIXTH. Finally the projects will be financed by a loan not exceeding twenty million dollars from the Federal Government which, with any receipts from sales of property and leases, will be carried in the Treasury in a separate revolving fund account; so that the receipts from any project will be available to pay for the acquisition of land on the next project undertaken. After a period of ten years there will be a balancing of the books, and one-half of any net loss on the completed projects will be paid back to the Federal Government from municipal funds.

It remains only to point out that no tax exemption is allowed by reason of the acquisition of real estate by the land agency. Our Commission has felt that the municipality should not be deprived of the taxes on private property by reason of its acquisition for redevelopment, and that the necessity for paying taxes would be the strongest sort of pressure on the land agency to effect its business transactions as promptly as possible and push the redevelopment in each area as much as possible.

The Commission is opposed to tax exemption to assist urban redevelopment because it becomes an indefinite subsidy the exact amount of which is hard to determine.

It has seemed to me most useful to give the specific solution arrived at in Washington for the redevelopment problem, with such explanations only as seemed necessary to show the possible application of the solution in other communities.

In conclusion, I can not summarize our views better than by quoting from the February 8, 1943, report of the City Manager of Kansas City, Missouri:

> Urban rot lacks dramatic evidence—its process is gradual. The Kansas City Housing Authority has been created to help the city solve this problem. But not one dollar should be expended until the planning agency has studied and approved housing sites as part of a whole plan. It is becoming more evident that the scale of rebuilding must be large enough to meet the objective of providing a physical basis for a satisfying community life. The plan for rebuilding, therefore, must be on the basis of areas larger than square blocks. If this theory is accepted the plan must provide more than rows of sanitary barracks to replace rows of unsanitary hovels. The guiding concept that is gaining wide acceptance is that of the neighborhood, free of disruptive through traffic, with its own play spaces, schools, churches and retail shops. Cities must be made places for good living for young and old. The neighborhood-in-the-city must be of a size to provide the amenities and yet be intimate enough for a real community life. Large-scale planning will permit less crowding without undue dispersal * * * The gridiron pattern of streets with its too high proportion of land in street area can be abandoned and still yield a high salvage value for the large investment in water and sewer lines. Such areas would not necessarily be conceived as neighborhoods of classes by income or occupation but each as a well-rounded community.

CITIZEN EDUCATION

Enlisting Citizen Action and Interest for Planning

HON. VINCENT J. MURPHY, Mayor, City of Newark, N. J.

WHEN I looked over the agenda of this conference, I was particularly impressed with the fact that it was the desire of the leaders of the American Planning and Civic Association to have this entire discussion conducted from the standpoint of how it affects the public at large and what it may mean from the standpoint of community growth, to their respective cities, and to the building of a greater America.

The subject which was assigned to me is one which I look at chiefly from the point of view as to how planning will materially concern the average citizen, the average taxpayer, and the men and women who make up the backbone of our communities, and our democratic way of life.

I know that all of us, especially public officials, regard our own specific cities and towns of dominant importance. We feel, and I am sure, with a sense of pardonable pride, that our own communities comprise the very best in human material and resources, and we always like to point with pride to this or that kind of an accomplishment.

While this is generally true of men and women in public life, it is by no means limited to those in public life. Each citizen, each business man, educator or clergyman will stand up for his community and will cite one or more of its outstanding attributes or achievements.

I say this by way of introduction because in dealing with my theme today, I naturally turn to the city of which I am a native and which I have served now as city commissioner for nearly nine years and as Mayor for five.

Newark is the largest city in the State of New Jersey and while it is comprised of nearly half a million people within its own limits, it is, nevertheless, the metropolitan center of a group of communities having a total population of more than one million people. It is not far-fetched for me to say that the many residents in the various suburban communities of Essex County and North Jersey have a close interdependence upon Newark, its industries, its labor and its commercial houses.

Very frequently it has been pointed out that we in Newark comprise more or less an independent Metropolitan Community lying within the greater New York Region. We are known not only for our manufacturing importance, but Newark holds a significant position among the financial, insurance and trade centers of the Nation. Now, basic to this subject of planning in all its aspects, I may also cite the fact that we have unusually favorable circumstances for the location and expansion of industry. You have heard of Newark's airport. There is also a large sea-

port within the city limits providing the only point on the East coast where air, rail, water and truck transportation have been planned together and coordinated at a single central location. Few communities possess such an advantage.

When to this is added the fact that in Newark and its immediate suburbs, there is one of the largest concentrations of skilled labor found anywhere in the United States, the inducement to industry is readily apparent. Perhaps I may be pardoned one more statement about my city, namely that during the recent historic war effort, the Newark Industrial Area was declared a No. 1 critical area and was considered the second important war material manufacturing center in the United States, preceded only by Detroit.

We did a magnificent job in that war effort. We certainly kept the homefront moving at top pace and, with a sense of pride and deep patriotism, we backed the attack in every sense of the term. This, of course, is just by way of passing, but I believe it has a bearing upon the basic theme of these remarks.

Now, it is natural that large eastern cities with advantages such as I have cited, should also have their problems. It is natural that industrial concentration, out-moded structures, unusual population density, and close restriction of the city's area, all should pose problems.

Two and one-half years ago, when I took the initiative in the formation of the Central Planning Board in Newark, it was with the realization that although we have a large airport and seaport and large vacant tidal flats within the city's limits, Newark is the third most densely populated city in the United States. We had to realize that large sections of the city were out-worn and out-moded, although, of course, right now, with the housing shortage, every available bit of space is rented, and that goes for stores and office buildings, as well as for residential purposes.

Before the war, we were experiencing a substantial falling off of our population and tax ratables and then, too, in common with most of our eastern cities, we have a relatively high tax rate and a high bonded debt, circumstances having brought these about because of developments in municipal administration long before some of us took public office. So it was that two and one-half years ago, I felt that the time to start planning for the postwar period was then, and not after the hard-earned victory had been achieved. My colleagues on the Newark City Commission were in accord with my point of view and we set up the Central Planning Board to establish an all-inclusive program of planning which could be closely integrated with public works and a long-range financial program.

Along with the planning program we believed then and feel still more certain today, that public education and public interest for any such planning is absolutely necessary if a successful development is to be assured.

The conditions which we could clearly see some three years ago were so real that no conscientious public official could ignore them. It was evident that not only would there have to be a process of re-building and redevelopment but that it would have to be done through a responsible source that could head us in the right direction.

At that time, by the way, the cry was primarily that we owe it to our service men and service women and to our returning veterans who were giving their best to fight for everything we held dear. To be sure, that was the great justifiable argument, and the housing situation alone has proved that we are still faced with a great obligation to the returning service men and service women. This is aside from the general economic problem, where job security and social welfare are concerned, and to which he and she are so rightly entitled. But the problem now has become more than that cry of three years ago. Now we really want to see a better and greater city for its own sake and for all the people who live in it.

Three years ago various departments of our city, having had to curtail their normal activity during the war, were beginning to consider postwar projects of various kinds which would require major expenditures. However, in view of our financial condition, we wanted to make certain that all expenditures which were made in the future would be wisely selected and of greatest public benefit. This discussion made us all eager and enthusiastic to do something about it and get some kind of an over-all guide for the development of our city. The various ideas were discussed at numerous meetings. There was talk and there was enthusiasm and, I might add, there was a feeling of high hope about things, and then we began to get down to the real earthy objectives of a city plan for Newark.

In June 1943, the city commission enacted an ordinance in accordance with our state law, creating an official Planning Board for Newark, charged with two main responsibilities: First, to make and adopt a comprehensive city plan and second, within the framework of the plan, to prepare a program for postwar public improvements to be submitted to the Board of City Commissioners.

On January 1, 1944, we began the task of making the master plan. We are now well over two-thirds of the way through the initial program and some of the conclusions and recommendations have already demonstrated the soundness of our approach.

I wish to point out that in July, 1944, and you will recall that this was at the very height of the historic conflict, the Planning Board submitted to the City Commission of Newark a postwar public works construction program. It was designed chiefly to do things that were urgent and also to endeavor to arrest any threatened decline in population, to provide needed public works, to catch up on deferred maintenance and, in general, to provide replacements of worn-out municipal facilities.

It was estimated this program would cost $14,900,000 of which $10,000,000 would be financed by general bond issue, the remainder to be made up of self-liquidating projects. You will agree with me when I say that such a program, if carried forward successfully, would reduce competition with private construction, particularly during this reconversion period, and, at the same time, give the city an opportunity to get its financial affairs in order so that when we reach the stage, which we may be rapidly approaching, where public works are needed for employment stabilization, we will be ready to proceed.

Like most communities in the Nation, we have a tremendous problem of housing and rehabilitation of blighted areas. Our housing program takes into account the necessity for constructing 2,200 new dwelling units, each year for the next 25 years, most of which will replace existing sub-standard housing, and, at the same time, we estimate that we could rehabilitate 22,000 units over the same period of time.

I may also say in passing that, as part of our planning program, we have secured the enactment of a new law in our State which includes a provision enabling the city to acquire property in obsolete areas and lease the property so acquired to a private redevelopment corporation for a period of 40 years with 20-year renewal. Land and buildings would be tax free but 12 percent of the gross revenues would accrue to the city as reimbursement for services rendered. The redevelopment corporation would also make a payment to the city for the rent of the land. In addition, half of the profits over 4 percent and all profits in excess of 6 percent would be returned to the city. The primary object behind this, of course, is that through such a measure private corporations would be interested to undertake redevelopment of large outworn sections of our city on a fair and equitable basis to both the city and the investing company.

I have cited all of the foregoing as a preliminary to understanding what some of our problems are in Newark, how it came about that our board was created and something of what it has done up to the present time. All of this was essential in order to be able to focus attention upon citizen interest and enthusiasm in the community.

The only effective means of enlisting citizen interest in the community is to create a widely representative citizen's group. Our group is known as the "Citizen's Advisory Committee to the Central Planning Board." This Citizen's Advisory Committee now includes more than 160 representative men and women of industry, business, labor, education, welfare bodies, the press, finance, and the cultural life of our community. While a number of these committee members have their residences outside of Newark, their active business and civic interest is closely linked with that of our own city.

This Citizen's Advisory Committee is really the spring-board and the sounding-board for the fostering of public sentiment and opinion. Our

Citizen's Advisory Committee in Newark has been a tower of strength in the process of Planning Board procedure. Our technique proceeds upon the following basis: That preliminary reports on each part of the master plan as well as proposals for specific projects originate, of course, with the Central Planning Board. These are then referred to a specific sub-committee of the Citizen's Advisory Committee for study and for recommendation. The specific recommendation of the Citizen's Committee, whether for approval or amendment of the Planning Board's preliminary reports or specifically proposed projects, then comes back to the Central Planning Board: The Board reviews the recommendation, revises its plan if necessary, adopts the report or plan and then transmits its recommendation with report or plan to the City Commission for final approval. We have thus three community agencies acting in a coordinated manner upon broad plans as well as upon specific projects under those plans.

I may say that this is something akin to our legislative and judicial processes of government whereby legislation is enacted and then possibly may be reviewed—a sort of check and balance system—all intended for the good of the people.

The Citizen's Advisory Committee was divided into 13 sub-committees and each of these have to do with some distinct phase of the master plan. These sub-committees are: Central Business District, Education and Recreation, Health and Social Welfare, Housing, Industrial, Legislative, Municipal Finance, Public Building, Public Relations, Port Newark, Streets and Highways, Transportation, and Zoning.

Thus, we have a well rounded citizen representation on a group of committees dealing with all phases of our municipal life.

I say without reservation that our procedure of developing cross-sections of the citizen's point of view with regard to each recommendation made by the Central Planning Board in connection with the master plan, has been fully effective and has created wide public discussion of the various problems, the projects, and the recommendations.

For instance, right at this moment the Planning Board has made public a report on the traffic situation in the city, recommending ways and means of relieving the congestion and also the methods of improving the traffic flow between our city and the suburban areas. Columns of space are being devoted in the public press to a discussion of the entire traffic situation in our own city. The point I am making is that emphasis has become so great since the report was made that immediately the attention of all of the citizens is centered on the problem confronting us.

So was the case with the housing report and the airport and seaport when these reports were made. There was also considerable discussion on the public relations program when the public relations committee made its report.

Each member of the sub-committees rightly regards himself or her-

self as a very strong constituent part of the work that is being developed. That is the way it should be. We have selected people by virtue of their ability, their willingness to serve and their willingness to cope with the immediate problems that confront us. Picking names for the mere sake of selection, or as a reward for political deed or service, or as a means of currying favor, would be disastrous to the whole intent of this planning-board program. Bearing in mind that it is primarily John Citizen, so to speak, who is affected in the long run by the success or failure of a planning board program, we must necessarily pick the John Citizens who are willing to help us do the job. For example, the Legislative Committee prepared the urban development bill to which I made earlier reference insofar as aiding in the financing of housing is concerned. I may point out that the bill was so well prepared that it was enacted into law without an objection or major amendment.

I have purposely reserved the work of the Public Relations Committee for specific reference and a little more detailed discussion than was given to the other sub-committees, although I certainly stress the fact that there is no lesser degree of importance to their achievements and to their accomplishments.

The Public Relations Committee, as its name implies, is a very important part of the entire planning-board structure because it is through this committee, chiefly, that we center the attention of the public and that we also seek to develop ways and means of furthering interest among the citizens at large. This Committee, sometime ago, made some definite recommendations which I cite to you and which I feel can be applied to any community in developing its public relations program with regard to citizen interest. It was the feeling of this Committee that there should be a Public Relations Director on the staff of the planning board; that a qualified local advertising agency prepare in a professional way advertising and public relations material; that news releases and feature material be prepared citing the accomplishments of the city and its many advantages; that booklets of a non-technical nature be widely distributed in Newark and that there be window displays, exhibits, radio programs and kindred things—all intended to stimulate public interest.

The important point to remember is that this program of public relations in itself is not an immediate program but may be viewed as a long-range perspective toward which we would gradually work. Naturally, it involves expense for my city or any other city, but when you consider that in a competitive civilization, it is necessary to *sell* your ideas, your articles and your goods, all of which require enthusiasm and stamina, you can readily appreciate that we need a public relations program.

I have described in some detail the immediate program or objective of our Citizen's Advisory Committee. There is another function of this Committee which is by no means of secondary importance. It is the

long-range function. The job of seeing to it that the plan is continually adhered to and kept as a dynamic force in guiding the rebuilding and further development of our city. Interestingly enough the members of the Citizen's Committee think of themselves as trustees of the plan. Political administrations change and personnel changes in City Governments but there is no reason why the plan once made should be shelved or vitally altered with each temporary change in city personalities. As trustees of the plan, the Citizen's Committee feels that there will be continuity of citizen support. In short, they are the watch-dogs of the plan.

In coming to the conclusion of my remarks today, I feel that the Public Relations Committee, in making its report, said something very apt when it stated:

> City planning is just what the name implies. It is not something that springs into being over night.

We are confident that we have made initial progress on the road to what should be our future concern insofar as we can possibly view the future.

Everything today centers about planning. If all of you were in such close proximity to New York as we in Newark are, you would probably hear as much as we do about the plans of the United Nations organization for a permanent home in the East, and also about the present sessions of the security council at Hunter College.

In the final analysis, these representatives of the various powers are trying to chart for a new and better world insofar as human experience can do so. All our basic thought behind this today is, I believe, with the primary objective of trying to build a happier future for people. Our cities, then, are trying to do, in their own way, what is being done on an international and a national basis.

Uppermost in our minds must run the thought that unless we can profit on the basis of human experience by the mistakes that have been made up to now in the conduct of world affairs, we certainly shall not be able to build for that better world we hope for and fought for.

Similarly, if the public cannot properly evaluate the work that we are doing in trying to develop the greater and the better city, and if the people cannot be satisfied that the proposals are sound and worth paying for, then the whole structure will fall.

I recall distinctly that, to go back to my own city for a moment, in 1916 there was set up an unofficial Planning Board which prepared a comprehensive plan and we have been told frequently that it was one of the first—if not the first—comprehensive plans in the country.

It was not revised from time to time and made a vital part of the daily process of municipal administration. Whether this was due to the fact that we had a change in our form of government or not I do not know. I do know, however, that it was lost in the shuffle and the real

reason, it seems to me, was that there was little background and little public support for it when it was first prepared, nor was there sufficient emphasis upon bringing home its value to the citizens of the city.

Certainly, necessary steps have been taken today to build for community support. Now, we have worked on the basis that our plans have official status, we have competent engineers to guide us and we have community support behind it. I have confidence in this method of approach to planning. It is the democratic way. I have the confidence and the faith in my fellow Americans to believe that the sincere desire of the greatest majority is for a better world, for a better Nation, for a better State and for a better City.

It is in this spirit that I again express my sincere thanks to the members of your association and to my fellow participants in this Conference for the opportunity to present my views.

I believe that City Planning is one of our most important goals. I believe we can enlist that enlightened and unselfish public support which it merits, and which will build for us a happier community.

Report on Round-Table Session on Citizens Organizations for Community Planning

PANEL: C. Mckim Norton, Director, Regional Plan Association, New York, N. Y., Ch.; Lee J. Ninde, President, Indiana Civic Association, Fort Wayne, Ind.; Mrs. Florence D. Stewart, Community Relations Adviser, N.H.A., Washington; Mrs. William H. Wells, Executive Vice-President, Citizens Council for Community Planning, Washington.

EDWARD D. CONNOR, Executive Director Citizens' Housing and Planning Council of Detroit, Michigan, *Reporter*

REPORTING a discussion is not an easy task. Few people will read a verbatim recount of the proceedings. A digest, on the other hand, involves problems of emphasis and selection which are difficult for a reporter to make objectively. This is particularly true if he is himself involved in the subject being discussed. It is even more true if the discussion being reported has been lively, interesting, provocative, crammed with experience and thought. A summary also runs the danger of neglecting the truly important and significant in the interests of brevity.

In reporting the round-table on Citizens Organizations for Community Planning all of these problems are present. To avoid them I wish to make it clear that this is not intended to be a detailed account, a digest or a summary. Instead it is meant merely as a statement of what one person took with him from this most instructive exchange of experiences and ideas by people from all over the country who, one way or another, are concerned with citizens organizations for community planning.

Who Was There:

That was one of the striking things about this panel—the people who were there. WHO was doing the saying was as important as what was

said. You expected to find representatives of the larger city; problems of community planning are more acute there—or at least the need is more apparent, and the pressures are greater in our bigger towns. But it was somewhat of a surprise to find so many there from the smaller town and community. This, it seemed to me, was extremely important. It suggests that the vital necessity of community planning is becoming rapidly accepted even by segments of our American population which have too often, heretofore, felt that the planning process was synonymous with restriction. It indicates a growing understanding of the planning process as a tool of democratic living. The awakened interest of the smaller community in planning may have vast implications in narrowing the gap between large urban centers and smaller, more rural communities, and finally, it augers well for the future when our smaller communities—in which a great deal of growth may be expected—are planning in advance for this growth so that the common mistakes of city development may be avoided.

But a real problem must be met if this interest in planning is to be effective and good results obtained. Because most of the work in community organization has been done in larger cities, smaller communities interesting themselves in it do not find too much assistance available on their specific problems of organization and function. This points up the need for greater emphasis on citizen organization in smaller communities, in future conferences of the American Planning and Civic Association.

People at this session included planners, politicians, professionals from various fields, and just plain people. The why of this is worth a thought or two. More and more the planner is realizing not only that his plans must have citizen understanding and support if they are to become realities, but he is seeing, too, that if his plans are to be realistic the citizen must participate in the planning process from beginning to end. A larger and larger number of politicians are recognizing that vital issues of the future are encompassed in this term "community planning" and that their performance as office-holders will be weighed in terms of the role they play on this stage. The professionals from all fields—including that of organization—are becoming conscious that citizen organization in community planning offers a channel not only for utilization of their skills, but for expression of the best motivations and highest aspirations of their profession in terms of working with people and service to society.

People were there, in part, as representatives of organizations—social, business, labor, fraternal and civic. These organizations are beginning to see that, regardless of their primary purpose for existence, they must have a strong interest in the general welfare of their own membership and that nothing affects their members more than the kind of a community in which they live. The future of the organization is enmeshed with the future of the community, and often their own objectives can best be

reached, and sometimes only reached, through the mechanism of citizen organization for community planning.

The people were there, too, in the person of individual citizens representing only themselves—symbols of a constantly growing awareness on the part of an ever-increasing share of our population of the importance to us all of how we live. These individuals expressed the determination of widening circles of people everywhere to insure that our civilization realize to the utmost its promise of vital, integrated, meaningful living for the individual. They were saying that our cities and towns as an expression of our civilization must be so designed, must be so built and rebuilt, and must so function in the future that the needs and interests and desires of people will find satisfaction and fulfillment. They were saying the job was too important to be left to a few. They were saying that if the job is to be done it will require the energy and the brain-power and the work of all.

WHAT WERE THEIR QUESTIONS:

These were the people there. Now what did they say? Here, it seems to me, the questions asked should be listed, because they indicate the problems which concerned the group. In total they furnish a general outline of the subject. They also indicate in a broad way the approach of the group to the topic. So here are the questions, as they were asked and in the order in which they occurred during the discussion:

"How do you get a citizens organization under way—keep it going—and keep it effective?"

"What is the best form of organizational set-up?"

"What kind of membership should it have?"

"How can it be financed? How much financing does it need to do a fairly complete, well-rounded job? From what sources are funds obtainable?"

"Why do citizen organizations in community planning start? Is it because they have something to attack or something to defend?"

"What is the motivating influence behind citizen organizations for community planning? Isn't it to obtain local support for great national programs?"

"What are the functions of this kind of organization?"

"What are its purposes? What should be its objectives?"

"What channels or media of education does it use? What relationship should a citizen organization on planning develop with the public schools?"

"How much research should such an organization do? What type? Who finances the research?"

"Who controls?"

"Should a community have both a planning and a housing council?"

"What is the relationship between a citizens planning organization and the housing commission? The official planning commission?"

"What is the relation between housing and planning?"

"Should an organization of this kind do social planning?"

"Must a citizens planning organization 'sell' its program to the people?"

WHAT WERE THE ANSWERS:

To no one of these questions did there appear to be any single answer to which everyone present agreed. Even where substantial agreement on a particular answer appeared to exist, it was clear that the application of that answer varied widely among the different localities. This, to my mind, is a healthy sign in this field, especially at its present stage of development. To me it is a sign of strength that citizen organizations for community planning are growing and operating in terms of their own communities and in terms of the problems and resources available. While this is good, it stresses the need for constant exchange of experience and ideas between such groups. It also points up the need for combinations of local citizen organizations on problems of mutual concern that can only be handled on an area, state, regional or national level. And it defines essential areas for the functioning of the American Planning and Civic Association.

FORMS OF ORGANIZATION:

Nowhere were these wide differences of approach more clearly shown than in answer to the question "What is the best form of organization?" Some councils are formed of individuals only. In this group are those in which membership is open to anyone interested in the problems of community planning. Others are restricted in membership to a small number. This small number may be a key group of leading citizens representing in their thinking all important points of view or interests in the community, or it may be individuals possessing skills needed in planning. Again, it may be restricted largely to persons from a certain segment of the community like business or the construction industry or property owners.

A second type of citizen organization for community planning is a federation of organizations, usually through a board of directors composed of representatives from many organizations. Occasionally a combination of the first and second type is found. In a few cases what is called "citizen organization" is more nearly a foundation or institute. The organizations described so far are unofficial in character. But some citizen organizations have an official, or at least semi-official, status. These would include officially appointed citizen advisory committees established in connection with governmental agencies or commissions. In some cases this status is achieved by a commingling of governmental and citizen membership on boards of directors and in one case it arrives out of the way in which the organization is financed.

Organizations of these types may be found on a local level ranging from the neighborhood through the community to the city-wide form. Some are township or county. Others are area-wide. Some can be found

which function on a state basis. A few cover a region or several States, examples at the national level are known to everyone.

It is my feeling that many people find themselves confused when confronted with the bewildering array of organizational forms. It seems to me that a very worthwhile contribution would be made if a study could be undertaken (possibly by the American Planning and Civic Association) of the citizen organizations for community planning now in existence. A study of this kind would include not only an analysis of structure, functions and purpose, but should show actual programs conceived or under way and results obtained. A listing of advantages and disadvantages of each might be made. A study along these lines would be helpful to existing organizations in self-evaluation and would also give some guidance to those forming new organizations. I know that many will join with me in the sincere hope that such a study be undertaken.

FUNCTIONS:

All of these types of organizations act in the same general way. Differences between them in function or operation appear in most instances to be largely the degree of emphasis of one activity as against another. In describing their work, nearly all use words and phrases like "stimulating and promoting interest in planning, planning work and planning action," "to coordinate planning and planning work," "to serve as a liaison or two-way channel between people and planning agencies" and "to plan and work for a better community." They nearly all engage in research ranging from comprehensive projects of initial, primary research on basic problems to short, quick projects to check the validity of official reports and proposals. Some confine themselves to evaluating the research of others. All are engaged in educational programs and all to some degree have an interest in legislation. It would only be through a detailed account of actual projects and programs that specific methods of operation could be shown. This, it seems to me, could well form part of the study suggested earlier.

PHILOSOPHY:

And finally I ask myself, as I know you do, has there developed or is there developing a well-defined, clear-cut philosophy of planning and of citizen organization for community planning? What are its objectives, purposes and principles? There may be a clue to the answer in these quoted excerpts from the discussion. Again they are given in the order in which they occurred:

"People are not interested in planning *per se*—but in problems"

"Issues are what makes planning—not planning in abstract"

"Interest people in the job you are doing" (I wonder why?)

"Each area has its own problems and personalities. The type of organization must be one that fits the shoe to the foot"

"Planning, as we are talking of it, concerns itself with the physical aspects of a community."

"It is necessary to sell city planning to people like a bill of goods." (Maybe, but I wonder if this might not be dangerous—depending on who is doing the selling and what is being sold).

"Selling, yes. But plans must change—so it is selling a process, not a plan. It is teaching people to think."

"A city is neighborhoods and neighborhoods are people. So planning must deal with people."

"Citizen education should begin in the nursery."

"Citizens must have active participation as well as passive education in planning." (Why do we think of education as passive?)

"Housing is qualitative as well as quantitative."

"A citizens' organization is the local conscience in planning."

"A citizens' organization must be representative of the total community."

"Our problem is not rectifying the mistakes of the past—it is building for the future."

"Planning must be the concern of the planner and of the politician, but above all, it must be the concern of the people. It is the people who pay for the lack of planning. It is the people who must see to it that planning is done."

So this report is back where it began—with people. And this, in my opinion, is a good place to leave planning and any report on planning—with the people.

In conclusion, may I repeat again that I found this session on Citizen Organizations for Community Planning stimulating and thought-provoking, informative and fun. Everyone present felt the same, I know. And we all join in the hope that future annual conferences of the American Planning and Civic Association will again provide the opportunity for discussion of this most important topic.

Round Table on College Courses for Citizen Education in Planning

PANEL: Flavel Shurtleff, Associate Professor of Planning Legislation and Administration, of Massachusetts Institute of Technology, *Chairman*; C. M. Dwight Wood, Planning Engineer of Lansing, Michigan; Lt. Col. N. T. Newton, of the Graduate School of Design, Harvard University.
Henry L. Kamphoefner, A. I. A., Professor of Architecture and Architect on Campus Planning of the University of Oklahoma, *Reporter*.

Chairman Shurtleff after an introduction of the members of the panel and the reporter, asked the 32 participants to introduce themselves. He pointed out the field of the Round Table by saying:

In this discussion we are not interested in a professional training such as we give to design students in the Colleges. We are not interested in making more technicians. We want to discuss the courses that we can give professional people to give them a view of planning in their communities. . . . There are a number of general courses at M.I.T. which are open to all who want to take them, such as courses in the humanities open to the citizens. . . . We should also cover this morning what is generally called extension work. Sometimes lectures are given on the campus or at other places in the city.

Lt. Col. Newton commented:

Finding myself on a panel discussion of this kind is a surprise to me. . . . Although I have had no opportunity to turn it down. After four years in the army 2½ of that overseas . . . I expected to listen since I know very little of what has been going on in this country in the last 4 years.

Landscape architecture has suffered through years of misinterpretation. . . . Landscaping means more than just bush planting. It should be the entire physical environment. The modern landscape architect concerns himself with the relationship between man and his physical environment, in that role he is often called: A Land Planner.

If courses in Landscape Architecture in the state supported institutions do not include broad courses in planning then the courses should be open for investigation by the tax-payers who should press for inclusion of the broadest possible scope of physical planning. . . . Extension courses can go out to the people and enlighten them as to what is involved in land planning.

All instruction in Landscape Architecture at Harvard is now on the graduate level but an extension of the work in landscape design is under discussion which will include two years of courses in civic design during the first two years of college work.

Mr. Shurtleff then called on the Reporter.

Prof. Kamphoefner stated that:

No work has been done at the University of Oklahoma up to this time in City or Regional Planning. With a very small staff, the University has been preoccupied mainly with building design or perhaps projects as large as a small housing project. The college officials understand the need for studies in City Planning to be coordinated with the students' work in architecture and for some time have been trying to find a competent city planner to be associated on the staff. If the proper man can be found it is the intention to open courses in city planning to students in sociology, economics, civil engineering, etc., as well as to

architects. Such a man should be available to the communities of Oklahoma for consultation on planning problems and for short courses and seminars for citizen groups.

Gabriel Harman, of Denver, formerly of Dallas, Texas, explained he was a graduate in Landscape Architecture from the University of Illinois and was later, Land Planner in the Dallas Office of the City Plan Commission. He thought it regrettable that Texans should have to go so far afield to get proper professional advice on planning. Professor Hugo Leipziger of the University of Texas has been doing some remarkable work in the large Texas communities by explaining the basic principles of planning to representative citizen groups but there is no other school in the west where such information is available except Iowa State and Illinois. Students coming out of many of the schools of architecture have no comprehension of the broad phases of planning. Competent faculty personnel is needed in all the schools to train students in the essentials of planning because many students can not afford to go on to the larger schools of the east. If the principles of planning could be given to large groups of students in the Colleges and Universities those students could go home and become enlightened leaders in their communities in the affairs of planning.

Mr. Shurtleff commented that:

Mr. Harman had made an important point by his mention of the need for competent advice for the local planning commissions. It is true that it takes time to show a planning commission just what they can do. A planning commission often remains useless because it does not know what to do. It is important to get informed, competent people in planning commissions.

Mr. Wood thought:

Citizen education in planning important to the community. He said that his position demanded that he sell planning to Lansing, Michigan. Most people in the community had thought of planning as blue prints of a bridge or a building. It is necessary to reach the politicians through an enlightened citizenry. Leadership comes from both the top and the bottom. If citizens can be sold first on the merits of planning they can then sell the projects to the city administration.

Mr. Shurtleff maintained that:

The selling of city planning should not be for the already overworked city planning engineer, but there should be a public relations man in the planning offices.

Miss Koch of Smith College, stated that:

At Smith it has been difficult to get good material on planning. A course is now given at Smith in Civic Art which tries to give the women of Smith an idea of the contribution they may make as members of planning boards, women's clubs and in the promotion of planning matters.

Mr. Shurtleff explained that:

At M.I.T. there is a short course which lasts 3 weeks and is open to anyone. It is taken mainly by members of town planning commissions, public utility

and similar groups. Last year the military services sent some instructional staff for airport design and planning. The course acquaints people with the principles of planning and for those who submit to it ideas have been given that can be taken back to their home communities where they will often become leaders in the local planning commissions.

Mr. Howard Bissell of Stockton, California, stated that he went to M.I.T. as an architect to learn some of the principles of planning. What he learned at M.I.T. has helped him to blossom out in the field of town planning and he now has to play ball with 4 planning commissions. He goes out in that official capacity to a large area. He stated that in California, by law, every county must have a planning commission and each must have a master plan. Proper coordination is needed to adjust the conflict between the city and the county. He has taught some courses for citizens in the College of the Pacific to give them an idea of what planning is all about.

Mr. Shurtleff commented:

This is a fine example of what can be done.

McKim Norton, Director of the Regional Planning Commission of New York City, said that he thought:

The course at M.I.T. had a very practical application in that it helped in the drafting of a planning law for the Philippines while he was yet on military duty. The work in the M.I.T. course was useful in many ways in making him the father of planning in the Philippines. Veterans have often been coming to the New York Planning Board office to ask where college work in planning can be found. He has assembled for the New York office, catalogues from the schools that offer planning, including the new course under Rexford Tugwell being set up at the University of Chicago. Leaders in the planning field now seem to be represented by physical planning at M.I.T. and in social planning by the University of Chicago.

George Smeath of Ogden, Utah, said that he has been teaching Landscape Architecture at Brigham Young University where he has been able to encourage the young people of Utah to think of planning problems in a basic course in Landscape Architecture. The 1941 legislature passed enabling legislation making county planning possible. Extension courses at the University have helped to start the whole program of planning in Utah.

Mr. Shurtleff then described Paul Oppermann's course at American University for citizens and laymen.

Lt. Col. Newton said that:

The New York Federation of Planning Boards gave institutes around the State which were aimed primarily at officials, but the attendance was about equally divided between officials and laymen.

Mr. Shurtleff recalled having attended such a conference in Rochester.

Lee J. Ninde of Fort Wayne asked the question, "How can you get it done?" This group needs salesmen, with salesmen there is the opportunity

to do something great. There is also a great need for the literature of the profession. The American Planning and Civic Association has only a few thousand members but it carries a lot of weight. However, its influence has not reached the rank and file of the citizenry. Even a leading business man of Indianapolis recently asked, "What do you mean by planning?" . . . Forces must be joined to get information from the University, extension courses and from institutes.

Mr. Vinsel of Louisville said that:

There is a need in Louisville for someone to come in for two-day institutes to reach the people who are not able to go out of the city for the information. The principles of planning must be explained to the people in Louisville, city officials and the leading business men. A University with a "traveling circus" on planning could do a lot of good.

Mr. Shurtleff commented that:

That kind of thing has just been going on in Oklahoma City for the two days preceding this conference.

Mr. Van Cleef of Oklahoma City explained that:

There were many reasons for the experiment in Oklahoma City. The city has a planning commission and there is also a Regional Planning Commission. The city is 57 years old and realizes the need for planning. The commission needed education and until recently did not know about the American Planning and Civic Association. Because of their ignorance of planning, it was decided to bring talent to Oklahoma City to explain planning to the people and the town officials. He asked if anything is being done by the Universities of the Nation to broadcast systematic programs on planning.

Mr. Vinsel said that:

One of the Cincinnati stations is doing that over the radio, and commented that there is also a need for radio and newspaper people to have an understanding of planning.

Mr. Shurtleff pointed out that:

A planning discussion was given last night over WFAA in Dallas on their "Let's discuss it" program.

Mr. Wood commented that:

More laymen may be looking for courses in planning in the Universities.

Edward Connor of Detroit called attention to the fact that:

Planning in the University is a vertical subdivision which lacks the overall pattern possible on the horizontal approach. He thought if all departments of the University would relate their work to planning and act as advisers to the students on all matters of planning, there would be a more basic understanding. The process of planning should be made as much of an end approach as the process of thinking in the education process. The planning problem may be a sales problem, "How do we effectuate this program?" If the clinic approach is used, it will require some additional teacher training in the University to adjust it to a modern base.

Floyd Jennings of Grand Rapids, said that:

The Chamber of Commerce promotes a type of economic planning, but how can that type of planning be fitted into other planning programs such as the Council of Social Agencies, or the Real Estate board? Perhaps this program should define just what local planning really is.

Mr. Van Cleef replied that he thought:

The solution is the employment of a group of competent men as experts.

Mr. Jennings maintained that:

The plan must be dynamic or it accomplishes nothing. That is, money must be voted to support it and the "static" map must be implemented and become a dynamic part of the city government.

Mr. Shurtleff stated that he thought:

Our courses in citizen education in planning must talk about public administration and how the plans can be carried out through public administration.

Lt. Col. Newton pointed out that:

Planning is not a thing; It is a process—an attitude. If that can be put across, it should foster the kind of thinking developed by the horizontal division of teaching at Harvard. It is not only the faculty council in the School of Design that is needed to train the City Planner but all other departments must have a hand, such as government, law, engineering, architecture and landscape architecture. Dean Clarke of Cornell says, "There is no such thing as *a* City Planner; city planning is a collaborative effort."

Mr. Jennings commented that:

This is quite true but on the other hand in the small communities one man must do it all.

Mr. Bissell pointed out that:

Many planning committees are rather jealous of other planning committees. For a free dissemination of information, it is often necessary to secure admission into a number of other committees to put over the ideas and information in a coordinated way.

Mr. Norton said that:

Planning at this conference is mostly associated with public works, but private capital builds most works. Often the most important part of the city plan is what is hidden in the zoning ordinance. People must understand what that means. Real Estate people must be kept in line by intelligent zoning.

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